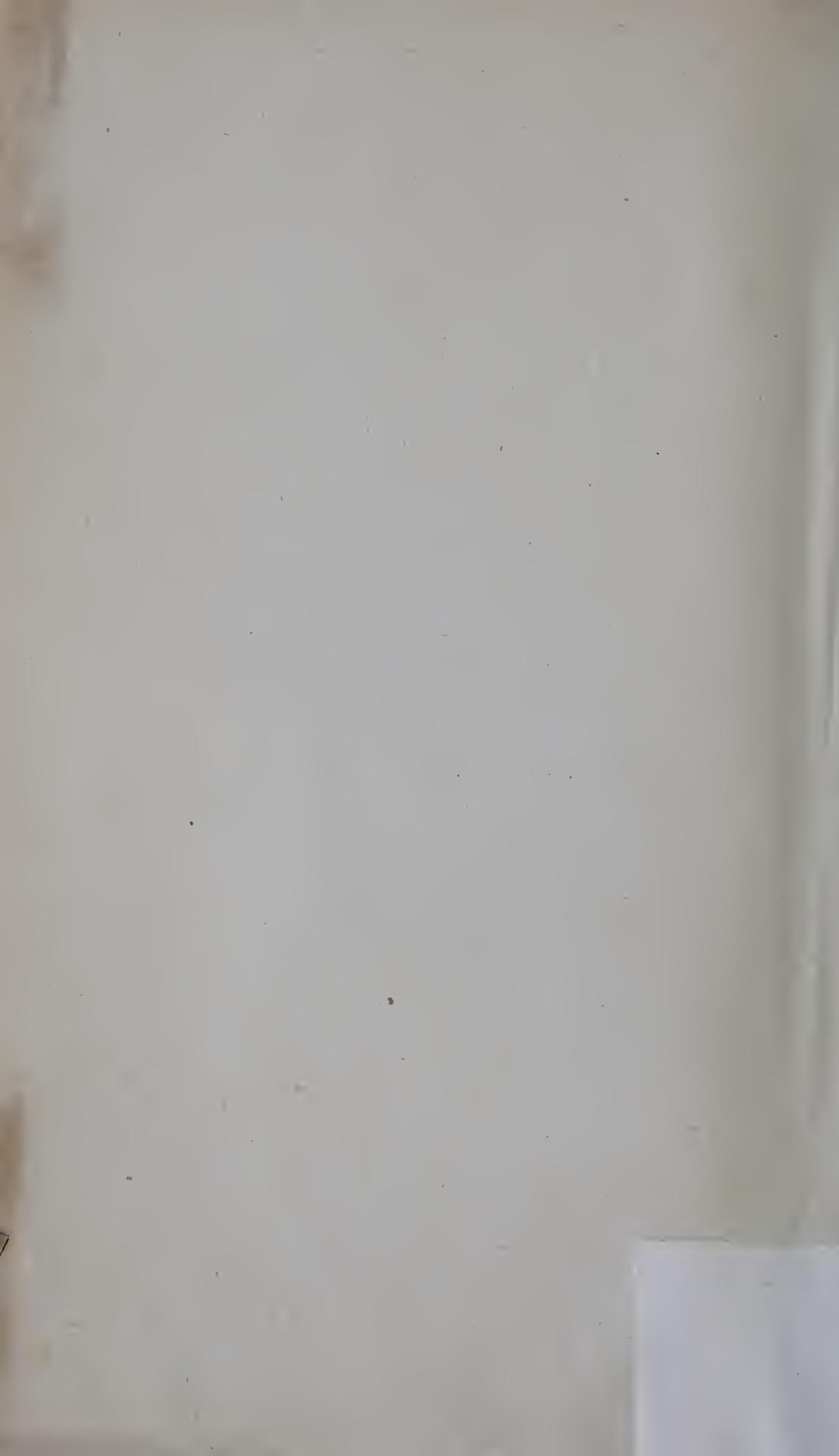


Arthur F. Mathews. '96.



REPORT

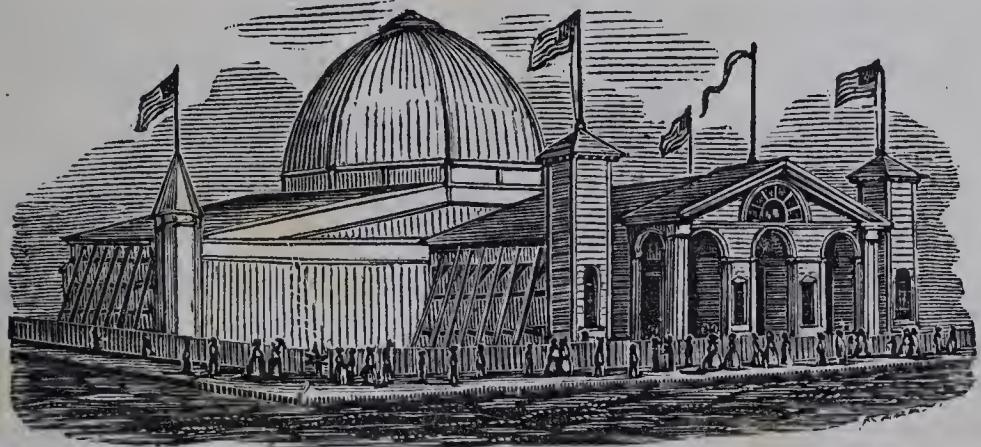
OF THE

Fourth Industrial Exhibition

OF THE

MECHANICS' INSTITUTE

of the City of San Francisco,



Held at the Pavilion of the Institute,

From the 2d September to the 1st October,

A. D. 1864.

SAN FRANCISCO:

PRINTED AT THE OFFICE OF THE MINING AND SCIENTIFIC PRESS.

1864.

**THE
MECHANICS' INSTITUTE,
OF THE
CITY OF SAN FRANCISCO.**

Organized March 29th, 1855.

Building of the Association.

NO. 529 CALIFORNIA STREET.

Library Hours, from 8 A. M. to 10 P. M.

TERMS OF ADMISSION.

Shareholders' Membership, \$5.00; Quarterly Dues, \$1.50;
Subscribing Membership, Initiation Fee, \$1,50;
Quarterly Dues, \$1.50.

Officers:

PRESIDENT.....	JOSEPH BRITTON
VICE PRESIDENT.....	A. S. HALLIDIE
RECORDING SECRETARY.....	P. B. DEXTER
CORRESPONDING SECRETARY.....	WM. PATTON
TREASURER.....	EDWARD NUNAN

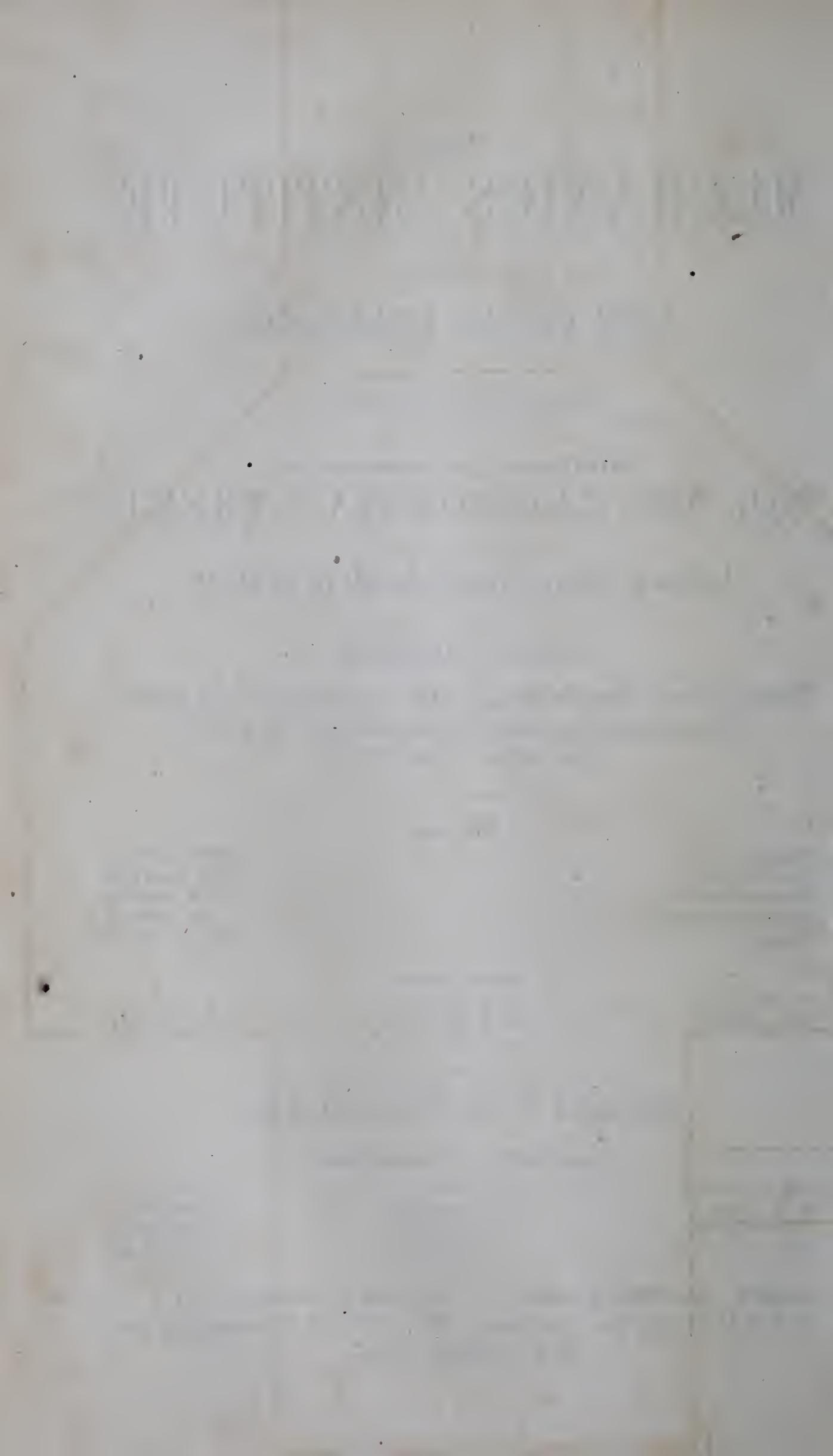
Directors :

P. J. O'CONNOR,
E. N. TORREY,
W. H. KNIGHT.
W. W. HANSCOM,
JAS. A. PRITCHARD,
C. R. STEIGER,
H. F. WILLIAMS,

Managers of the Industrial Fair.

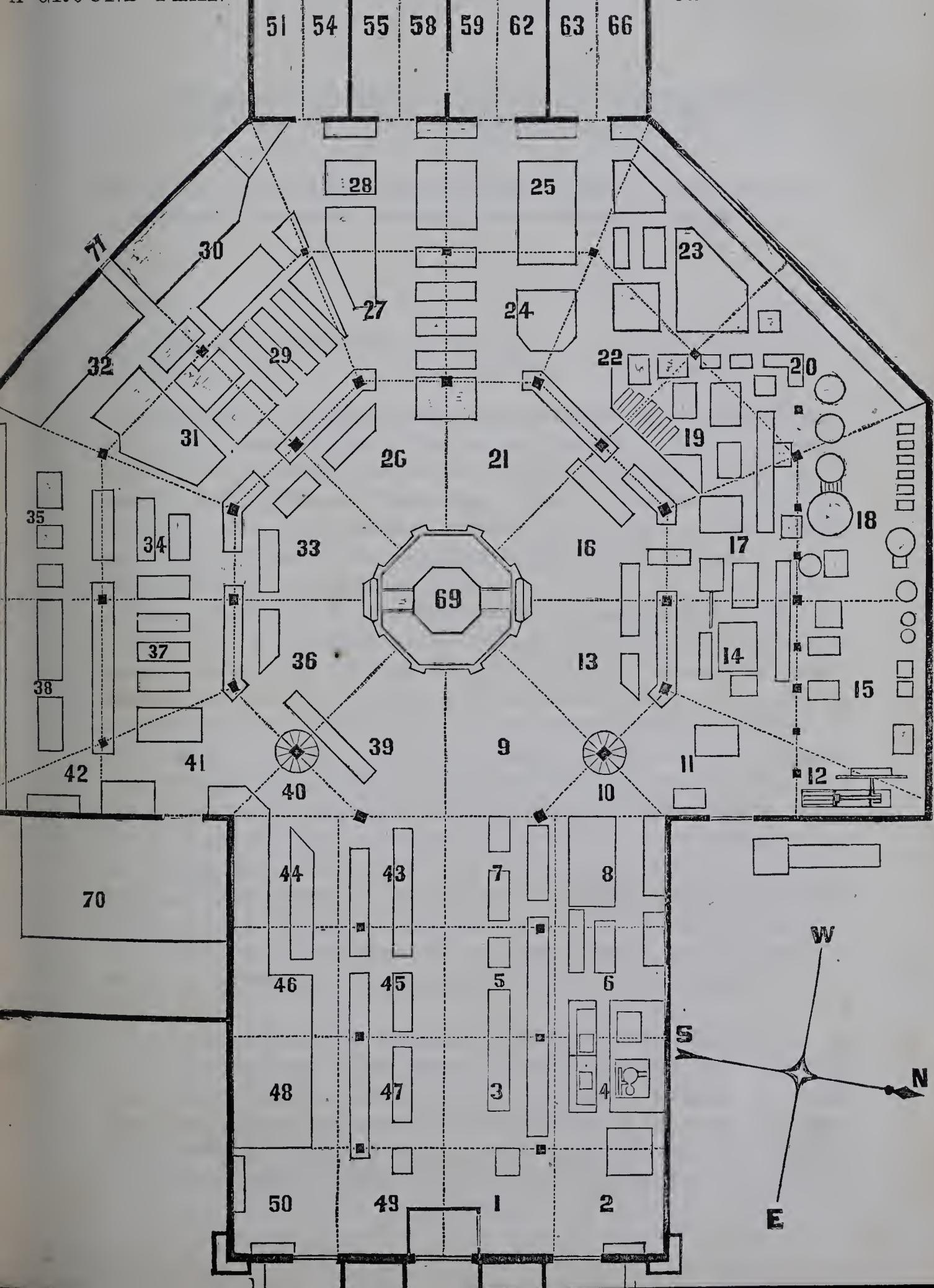
Executive Committee:

JOSEPH BRITTON,
W. H. KNIGHT,
A. S. HALLIDIE,
W. H. PRITCHARD,
H. D. DUNN,
H. F. WILLIAMS,
P. J. O'CONNOR,
C. R. STEIGER,
E. NUNAN,
E. N. TORREY,
P. B. DEXTER.
W. W. HANSOM.



A GROUND PLAN

OF THE PAVILION.



REPORT OF THE EXECUTIVE COMMITTEE

For the Fourth Industrial Exhibition of the Mechanics' Institute of the City of San Francisco.

*To the Members of the Mechanics' Institute
of the City of San Francisco.*

GENTLEMEN :—Your purpose of holding the Fourth Industrial Exhibition of the Institute in the Autumn of the year now closing, was declared, by resolution adopted at a meeting held on the 19th of January last, and at the regular monthly meeting in April following, the officers of the Institute were constituted an Executive Committee to carry out the purpose then resolved upon. The committee was accordingly organized, and engaged at once in the prosecution of its appointed work.

Admonished by the financial failure of the last previous Exhibition, which contributed, in a large degree, to the embarrassments from which, by extraordinary exertions, the Institute had just been raised and placed on a sound financial footing, with a promising future of usefulness opening before it, your committee was solicitous to find means of insuring it against any possible failure of the projected Exhibition to defray its unavoidably large expenses ; and to this end it was proposed that an effort should be made to obtain from friends and the citizens willing to aid so important a public enterprise, a loan of ten thousand dollars, to be repaid, without interest, from the net receipts of the Exhibition ; and it is gratifying to be able to report that this large sum was readily secured, in subscriptions ranging from fifty to five hundred dollars, and your committee cannot speak too warmly in commendation of the liberality of the gentlemen who so promptly responded to their call. [A list of the subscribers to the loan will be found in the financial portion of this report.]

As the city contained no suitable building for the Exhibition, and one was to be erected expressly for the purpose, it was necessary to secure the privilege of some centrally situated ground upon which to place it. The city's rapid growth during the past few years had left few, if any, available private lots of sufficient extent unoccupied, and the object was deemed of sufficient public importance to warrant an application for the privilege of one of the

public squares, and the city authorities so regarding it, upon petition of your committee, granted the use of Union Square for the purposes designated. Bounded by Stockton, Post, Powell and Geary streets, and containing a full block of lots, with lines of city railroads through two of the bordering streets, this square, though recently on the outskirts of the city, is now in the center of population and improvements, and is probably as well situated for such an Exhibition as would have been the more familiar Plaza, for which a preference had been entertained by your committee, but which, for sufficient reasons, the authorities declined granting.

Having now secured a location, and a sufficient fund to assure the undertaking, your committee engaged the services of Mr. C. B. Porter as special agent to urge the objects of the Exhibition upon the attention of those engaged in industrial pursuits, and to secure suitable contributions of their productions for the Fair. A circular, similar in form and terms to those issued for the previous Exhibitions of the Institute, was prepared, and numbers were forwarded to every postoffice in this State, the neighboring Territories, Oregon and British Columbia. Copies were also inclosed and addressed to each of the newspaper and periodical publications, and other means employed to give it a wide and thorough circulation. Through the medium of advertisements in the city papers, and those of the principal places in other portions of this State, Oregon, Nevada, and the British Colonies, the plan and objects of the Exhibition were presented, and co-operation invited to render it, as far as possible, a worthy Exposition of the resources and industries of the western North American coast and the Pacific islands ; and our efforts to this end were warmly seconded by the press of the interior of the State and the adjacent portions of the coast, while, from the inception of the enterprise to its consummation, the press of our city accorded its earnest and efficient support.

The magnitude and importance of the duties devolving upon the Executive Committee, rendered it proper to add now to the original numbers, in accordance with the authority by which it was constituted, and thus recruited, the plan and dimensions of the building for the Exhibition engaged our attention through many protracted consultations. The dimensions of the Pavilions used for the previous Fairs supplied the data upon which an approximate calculation for the size of the building required could be made ; and it was found that the Pavilion for the first Exhibition in 1857 covered an area of 20,000 square feet, and for the Exhibition of the following year an addition of 5,000 feet was found necessary. The Pavilion for the third Exhibition, in 1860, was still 5,000 square feet larger. The lapse of four years had marked a great progress in the development of the mechanical and manufacturing Interests and the material Resources of the Coast, which would render a much larger provision necessary at this time for a satisfactory Exposition. It was therefore apparent that no space less than 40,000 square feet would be sufficient, and it was determined that the plan should be based upon this calculation.

The unavoidable cost of so large a structure was seriously contemplated by your committee, and every means sought to limit it as far as would be consistent with the purposes to be accomplished. Various plans were care-

fully considered, and that finally adopted was thought to combine, with the large space afforded, imposing architectural features, which would contribute to render the Pavilion an attractive and agreeable place of resort while open for the Exhibition, and thus more than compensate for the small difference of cost which a less imposing structure would have involved. The plan and specifications were prepared by our colleague, P. J. O'CONNOR, Esq., whose gratuitous services were also rendered in superintending its erection. The original form of the design—a Greek cross, surmounted with an octagon dome of one hundred feet diameter—was somewhat modified by inclosing the angles of the rear and side wings, so as to afford nearly 4,000 square feet of additional floor-room, independent of the extensive additions subsequently found necessary.

Public notice was given, by advertisement, that proposals would be received for furnishing materials and erecting the building in accordance with the plans and specifications adopted by the committee; and proposals for the contract were made by four different parties, one of whom offered to take it for seventeen thousand four hundred dollars (\$17,400), one for seventeen thousand two hundred dollars (\$17,200), one for sixteen thousand nine hundred dollars (\$16,900), and one for thirteen thousand five hundred dollars (\$13,500). The first three bids were deemed too extravagant to be entertained at all, and although the fourth was comparatively reasonable, your committee felt assured that it was still far above the proper mark, and the offers were all declined.

Time was now of importance, and without further delay the lumber required was engaged on very favorable terms, and a contract made with Mr. John Clark to furnish labor and workmanship for the erection of the building, in accordance with the plans and specifications, for the sum of three thousand six hundred dollars (\$3,600). The raising of the heavy frame-work and posts of the dome was expressly excepted from the contract with Mr. Clark, but was subsequently included, upon condition of the payment of five hundred dollars (\$500), making the entire sum of this contract four thousand one hundred dollars (\$4,100).

As the season advanced, the effects of the unprecedented drought and the extreme re-action of the mania which had led all classes of our people to engage wildly in mining speculations, were visible in every department of business, and occasioned serious apprehension for the success of the Fair. But our bark was too far on the voyage to be recalled, and our best hopes depended on its being urged with vigor. The interest which would induce preparation on the part of those engaged in industrial pursuits, to participate in the Exhibition, was not so great as would probably have been found in a more propitious season. But our agent obtained assurance of contributors which would occupy all the space provided, with such products of our varied industries as could not fail to render the Exhibition highly interesting and instructive, and within two weeks of the appointed time of opening, it became evident that material additions to the Pavilion would be required. A structure 100 by 98 feet was accordingly added, extending westerly to the Powell street line of the square. This extension was arranged in four divi-

sions, lighted from the roof, and occupied as art galleries, forming a very extensive and highly attractive department in the Exhibition.

Still another addition for restaurant, 60 by 30 feet, was found necessary, making the whole area covered by the Pavilion, exclusive of the boiler-room, 55,000 square feet: The completion of these large additions delayed the opening of the Exhibition, set for August 30th, to the evening of September 2d, when a large audience filled the New Music Hall to listen to the Opening Address, which was delivered by Hon. John Conness, and received with merited approbation by the hearers.

The Pavilion was opened to the public on Saturday morning, September 3d, and in the evening Messrs. Church & Clark honored the inauguration of the Exhibition with a splendid pyrotechnic display on the Stockton and Geary street corner of the square. The visitors during this day and evening numbered not less than five thousand; and although the internal arrangements were incomplete, and many of the articles for the Exhibition still unopened, the manifestations of approbation were unequivocal, and the seal of popular favor was at once unmistakably stamped on the enterprise; nor was it observed that the interest of those who were daily visitors diminished at all up to the close of the Fair, on the 1st day of October, after it had been twenty-five days open to the public.

With comparatively few exceptions, the Exhibition comprised articles and products of home origin, which furnished gratifying proofs of a greater progress in all the ordinary departments of mechanical industry and art, than the public were prepared to expect, and the magnificent evidences of proficiency and success in several of the important branches of manufacturing enterprise, were noticed with the liveliest degree of surprise and satisfaction.

The impression of *reality* conveyed by the evidences of progress presented in this Exhibition, will not fail to inspire confidence and encourage enterprise in the further development of our resources, and will tend to bring capital to us for investment, which might otherwise be employed in the production of our supplies, and their transportation from distant portions of the globe. The opportunities which the Exhibition furnished for the examination and comparison of the various improved appliances for working ores and extracting the valuable metals which constitute so important an element of our wealth resources, must prove of vast value to the interests of the country, and to those directly engaged in mining pursuits.

In the department of Manufacturing Machinery, Hydraulic and Hydrostatic Engines, etc., were comprised a large number of important inventions and improvements, calculated to contribute greatly to the general wealth and prosperity in effecting economy of labor and augmented production.

In the department of Ladies' Work, both fancy and useful, the contributions were very large, and many of them exceedingly artistic and beautiful.

The works of our resident artists formed one of the most extensive and attractive features of the Exhibition, presenting evidence of a degree of art, culture and appreciation highly honorable to those who, in the midst of a busy, eager population of pioneers, have devoted themselves to a pursuit which is thought to thrive only where the homes of wealth and leisure have long been established.

The contributions in other departments eminently testified to the taste, skill and efficiency of our industrial classes, and furnished instructive subjects of inspection and study to those interested in noting the marks of social and industrial progress ; while the visitor seeking entertainment merely, could not fail to find it in the almost endless variety of useful, curious and beautiful productions grouped on every hand—in the movements of the machinery, the action of the powerful pumps and water engines, in the inexhaustible resources of the art galleries, in the varieties of plants, flowers and fruits, in the fine music, the play of the fountain, in the animated throngs of visitors, and in the grand proportions of the Pavilion itself.

While in other respects realizing our best expectations, it cannot be claimed that the financial success of the Fair was equal to its popularity and its intrinsic claims ; but it will not be forgotten that the season was one of unusual depression, resulting from causes before mentioned, which operated with severity in all directions, especially curtailing the resources of the mining and agricultural classes of our population, obliging thousands in the adjacent counties and elsewhere in the State to forego the pleasure and instruction of visits which they would otherwise have made ; and, doubtless, considerable numbers of our city population were affected by these causes to a degree which obliged them to confine their expenditures to demands of necessity. Under the circumstances of such a season, then, we may feel grateful for the measure of financial success which has attended our effort.

In view of the measure adopted to relieve the Institute of pecuniary risks in the undertaking, it became a question with your committee, if it would be proper to follow the precedents allowing members free tickets of admission to the exhibition ; and this question was referred for determination to a meeting of the Institute, and you there unanimously decided that members should be subject to the ordinary charges for admission ; and this concession of personal privilege for the benefit of the Institute in whose behalf frequent appeals have been made to the liberality of the public, was manifestly proper under the circumstances.

Immediately prior to the opening of the exhibition, several of the most considerable contributors voluntarily surrendered their claims under the regulation entitling exhibitors to free tickets of admission, "when, in the judgment of the President, the articles were of sufficient value or merit," and they urged upon the committee, that the heavy expenses of the unexpectedly large preparations would justify an appeal to all exhibitors to forego these claims, of small moment to them individually, but in the aggregate amounting to a sum which would go far to assure the enterprise. This course was accordingly taken, and it affords us pleasure to be able to state that, with very few exceptions, the reasons were appreciated and the concessions cheerfully made.

To insure the selection of satisfactory and competent judges, the rules extended to exhibitors the privilege of electing the committee of examination and award for the class in which they were competitors.

Some delay was experienced in inaugurating this system of forming the committees ; but this in the future would be avoided, and the plan, with some

modifications, be found a great improvement upon the arbitrary system of appointment.

Several classes of exhibitors failed to make any selection of committees or to request an appointment, and a number of the most important mechanical and manufacturing interests represented in the exhibition could not be suitably classed for the examination of any of the regular committees, and they were consequently referred to a competent special committee, whose report will be found highly interesting.

The reports of the examining committees, as returned to the Executive, have been prepared under the direction of a sub-committee, and published from week to week in the *Mining and Scientific Press*, and the matter compiled for publication in pamphlet volume, together with the Opening Address, the Executive Report, Catalogue of articles exhibited, etc.

Your committee have to acknowledge their great obligations to Messrs. Goddard & Co., of the Pacific Iron Works, for their exertions in finishing, expressly for the purpose, the magnificent sixty-horse power steam engine, which furnished the motive power to the machinery.

To the California Steam Navigation Company, we are largely indebted for the gratuitous use of one of their steam boilers.

To the liberality of Messrs. John C. Bell & Co. we are indebted for the loan of a large number of flags for decoration of the Pavilion. We are also under great obligation for the loan of flags and bunting, to the United States Military Department of the Pacific, Messrs. J. J. Marks & Co., and A. Crawford & Co.

Our thanks are due to the Russell & Erwin Manufacturing Company for the loan of one of their fire and burglar-proof safes, and to Messrs. Hayward & Coleman for the admirable quartz mill lanterns, which proved of the greatest utility in the watch service of the Pavilion.

To Messrs. Brignardello & Bro. we owe acknowledgments for the fine Italian statuary which appropriately embellished the fountain.

Messrs. Paltenghi & Larseneur laid us under obligations in the loan of a number of comic stone sculptures.

We are also under obligation to Mr. Henry Miller, who furnished from his manufactory, the heavy leather belting connecting the lines of shafting and the steam engine.

The several transportation companies, and Wells, Fargo & Co., generously engaged to carry, without charge, goods intended for the exhibition, and they are entitled to our thanks for important favors.

The season of the exhibition closed on the night of Saturday, October 1st, a few days prior to which time, reports had reached our city of the prevalence of an alarming state of destitution among the population of some of the southern counties, resulting from the excessive drouth which had seared the earth and destroyed the herds which were almost the sole dependence of the people there. Measures of relief were at once organized by our citizens and your committee was invited to contribute a benefit of the Exhibition in aid of the object. The Pavilion was accordingly reopened for the day and evening of Monday, October 3d, and the entire receipts, \$1,368.30, passed to the hands of the financial officers of the relief committee.

The teachers and pupils of the Public Schools and of the Charitable Asylums visited the Exhibition on invitations extended by your committee.

The seamen and soldiers of the United States and the California volunteers were also our visitors by invitation, and tickets of admission were furnished to all employees of the Government in exchange for United States currency notes at par.

The great California Cheese (weighing 3,936 pounds) made and donated by the Steele Brothers, of Santa Cruz, to the U. S. Sanitary Commission, and Mrs. Holland's skating gallery, were exhibited at a special charge, and realized considerable benefits to the fund of that noble national charity.

In accordance with precedents, the Pavilion was cleared immediately on the close of the Fair, and prepared for a grand promenade concert and ball, which was given under the direction of your committee on the 7th of October; and it was subsequently, on the 14th of the same month, occupied for a ball by the Masonic Board of Relief.

With a reservation for the purposes last mentioned, the Pavilion had been previously leased by your committee, in consideration of \$2,000 cash in advance, for the term of one month, ending on the 9th day of November, and was used during that time for political meetings and military exercises.

Since the resolution adopted at the last meeting of the Institute, declaring your purpose of holding an Industrial Exhibition during the ensuing year, application has been made to the city authorities for the privilege of retaining the use of the square for the purpose; but up to the present time no final action has been taken on the application. The Pavilion, however, has been again temporarily rented; the rentor paying, in advance, five hundred dollars for one month, with a privilege of three months for an additional payment of four hundred dollars.

An act of great liberality on the part of the San Francisco Gas Company, in donating a claim of one thousand dollars for gas furnished to the Exhibition of 1860, should have been mentioned in connection with other acknowledgments, and also, a donation of two hundred and fifty dollars subscribed to the loan by A. W. Macpherson, and a donation of one hundred and fifty dollars subscribed by F. Moigueu.

We now invite your attention to the following statement of our Treasurer, showing in detail the receipts and disbursements of the Executive Committee:

ROOMS OF THE MECHANICS' INSTITUTE,
SAN FRANCISCO, DECEMBER 30, 1864.

To the Chairman and Members of the Executive Committee of the Mechanics' Institute for the Industrial Exhibition of 1864:

GENTLEMEN:—I beg leave to lay before you the following Report of the receipts and disbursements on account of the Industrial Exhibition of 1864, held under your supervision. Also a Ticket Report, showing the number of tickets sold of each class, and the persons by whom the same were sold. I did not consider as belonging to this Report the amount (\$1,368.30) derived from the benefit given to the Santa Barbara sufferers, as the amount was partially taken charge of, by the Committee for the same, before coming into my hands, and the remainder was passed to them at the close of the benefit.

Yours, most respectfully,

EDW'D NUNAN, Treasurer.

Synopsis of the Receipts and Disbursements of the Industrial Exhibition of 1864, as carried out in Detail in the following pages:

RECEIPTS.

To amount received from loans, as per Loan Account.....	\$10,300 00
To amount received from sale of Tickets (all classes) as per Ticket Account.....	36,511 00
To amount received per centage on Restaurant and Napa Soda, as per Account.....	665 35
To amount received, proceeds of Ball, as per Account.....	1,490 75
To amount received from Sundries, as per Account.....	2,912 45

DISBURSEMENTS.

By cash paid Returned Loans, as per Account.....	\$10,300 00
" " Ball Expenses, as per account.....	1,564 14
" " Building Expenses, as per Account.....	21,986 46
" " Sundries and Expenses, as per Account.....	13,987 04
" " C. B. Porter, Agent, to December 20th.....	1,200 00
Transferred to Treasurer of Institute.....	2,841 91
	<hr/>
	\$51,879 55
	<hr/>
	\$51,879 55

CASH DR. TO SUNDRIES.

RENT.....	To amount received from Union Party for use of Pavilion to November 9th.....	\$2,000 00
" "	from John Wilson for use of Pavilion to 31st of January, 1865.....	500 00
" "	from Masonic Board of Relief, for use of Pavilion on the occasion of their Ball.....	100 00
CIDER PRIVILEGES.—	To amount received for Cider Privileges during the Exhibition.....	125 00
SERVICES.....	To amount received for Services rendered by Employees.....	17 20
SHAKES.....	To amount received from sale of Shakes and Old Lumber.....	65 50
ROOFING FELT.....	To amount received for Roofing Felt sold.....	74 75
CARPET.....	To amount received for Carpet sold.....	30 00
	<hr/>	
		\$2,912 45

Received from (and returned to) the following persons as Loans to the Building Fund.

Joseph Britton.....	\$250 00	Brought forward.....	\$5,800 00
A. S. Hallidie.....	250 00	H. T. Graves.....	250 00
Wm. H. Knight.....	250 00	Wm. B. Cooke.....	250 00
Jas. A. Pritchard.....	250 00	Lewis Leland.....	250 00
Chas. R. Steiger.....	250 00	Tucker & Co. (J. H. Baird).....	250 00
H. F. Williams.....	250 00	Central Railroad Co.....	250 00
Edw'd Nunan.....	250 00	Hucks & Lambert.....	100 00
Wm. Morris.....	500 00	A. W. Macpherson.....	250 00
Thos. H. Selby.....	250 00	R. B. Woodward.....	250 00
Wm. T. Coleman.....	250 00	F. A. Weygant.....	100 00
Conroy & O'Connor.....	250 00	F. Moignieu.....	200 00
Alsop & Co.....	250 00	G. B. Davis.....	50 00
Geo. C. Johnson & Co.....	250 00	H. Casebolt.....	250 00
Russell & Irwin Manufacturing Co.....	100 00	Geo. Gordon.....	250 00
Wm. Alvord.....	250 00	Gallagher & Weed.....	100 00
O. F. Giffin & Bro.....	250 00	D. McLennan.....	250 00
H. D. Coggswell.....	250 00	John P. Buckley.....	250 00
Goddard & Co.....	250 00	H. K. Cummings.....	100 00
Jas. R. Bolton.....	250 00	Maedonald & Bro.....	250 00
Wm. S. Osborne.....	50 00	H. S. Gates.....	250 00
H. H. Bancroft.....	250 00	D. R. Coleman.....	100 00
Kennedy & Bell.....	250 00	North Beach and Mission R. R. Co....	300 00
H. Webster & Co.....	250 00	H. P. Coon.....	100 00
Meeker, James & Co.....	150 00	Andreas Pattenghi	100 00
	<hr/>		
Carried forward.....	\$5,800 00	Total.....	\$10,300 00

A. W. Maepherson donated his loan (\$250) to the Institute.

F. Moigneui donated \$150, and took a Life Membership for the remaining \$50.

TICKET ACCOUNT,

Showing the Total Number Sold, and by whom.

	DOUBLE SEASON.	SINGLE SEASON.	ADMIS- SION.	BOY AD- MISSION	BOY SEASON.	AMOUNT- ING TO.
J. B. Peirce.....	191	47	....	....	....	\$1,096 00
William H. Knight.....	11	5	....	....	....	70 00
P. J. O'Connor.....	8	3	....	....	....	49 00
Edward Nunan.....	8	1	....	....	....	43 00
H. H. Bancroft.....	13	2	....	....	....	71 00
B. McKeon (clerk).....	25	10	....	....	....	155 00
J. H. Baird (Tucker & Co.).....	33	10	....	....	....	195 00
D. A. Macdonald.....	20	15	....	....	....	145 00
	<hr/>					
Carried forward.....	309	93	....	....	....	\$1,824 00

TICKET ACCOUNT CONTINUED.

	DOUBLE SEASON.	SINGLE SEASON.	ADMIS- SION.	BOY AD- MISSION.	BOY SEASON.	AMOUNT- ING TO.
Brought forward.....	309	93	....	....	....	\$1,824 00
Joseph Britton.....	14	..	....	....	....	70 00
E. N. Torrey.....	146	20	....	....	....	790 00
A. W. Macpherson.....	16	7	....	....	....	101 00
F. A. Weygant.....	1	..	....	....	....	5 00
D. R. Coleman.....	11	5	....	....	....	70 00
R. G. Sneath.....	21	12	....	....	....	141 00
John Clark.....	51	30	....	....	....	345 00
A. S. Hallidie.....	17	7	....	....	....	106 00
Henry F. Williams.....	20	3	....	....	....	109 00
James A. Pritchard.....	2	..	....	....	....	10 00
W. Wallace Hanscom.....	23	..	....	....	....	115 00
William McKibbin.....	24	3	....	....	....	129 00
J. F. Sterling.....	10	..	....	....	....	50 00
Charles R. Steiger.....	25	11	....	....	....	158 00
Samuel Pilisbury (U. S. currency).....	145	9	....	....	....	752 00
A. Buswell.....	8	4	....	....	....	52 00
Henry Blyth.....	4	4	....	....	....	32 00
Jas. Brockaw.....	17	..	....	....	....	85 00
Robert Riddle (clerk).....	1485	436	40,075	2795	75	29,581 75
South Window.....	142	48	2215	....	3	1,966 00
Scattering (per Day-Book).....	....	....	48	1	....	24 25
Totals.....	2491	692	42,338	2796	78	\$36,516 00

RECAPITULATION OF TICKET ACCOUNT.

Double Season Tickets sold, 2,491 at \$5.....	\$12,455 00
Single Season Tickets sold, 692, at \$3.....	2,076 00
Boys' Season Tickets sold, 78, at \$1.50.....	117 00
Admission Tickets sold, 42,338, at \$0.50.....	21,169 00
Boys' Admission Tickets sold, 2,796, at \$0.25.....	699 00
Total amount Received for Admission.....	\$36,511 00

DOOR RECEIPTS EACH DAY DURING THE EXHIBITION, COMMENCING SEPT. 3D.

1st day.....	\$3,408 75	B't forw'd... \$15,938 65	B't forw'd... \$22,572 20	B't forw'd... \$26,690 20
2d "	3,188 00	8th day..... 1,406 80	14th day..... 749 00	20th day..... 599 25
3d "	2,344 75	9th "..... 1,189 75	15th "..... 725 50	21st "..... 687 25
4th "	1,677 30	10th "..... 1,127 00	16th "..... 726 50	22d "..... 679 25
5th "	1,887 60	11th "..... 1,089 00	17th "..... 620 00	23d "..... 787 00
6th "	1,704 25	12th "..... 820 00	18th "..... 564 00	24th "..... 985 75
7th "	1,728 00	13th "..... 1,001 00	19th "..... 733 00	25th "..... 865 50
C'd forw'd..	\$15,938 65	C'd forw'd... \$22,572 20	C'd forw'd... \$26,690 20	Total..... \$31,294 20

N. B.—The above daily receipts include the am't received for Season Tickets sold at the Door

DAILY RECEIPTS FROM RESTAURANT, INCLUDING NAPA SODA.

Being fifteen per cent. on gross receipts.

1st day.....	— —	B't forward.... \$245 95	B't forward.... \$453 95	B't forward.... \$555 15
2d "	\$24 50	8th day..... 39 45	15th day..... 16 80	21st day..... 17 25
3d "	40 70	9th "..... 50 05	16th "..... 21 00	22d "..... 18 60
4th "	45 75	10th "..... 28 05	17th "..... 15 60	23d "..... 18 10
5th "	45 05	11th & 12th day... 45 60	18th "..... 17 25	24th "..... 26 25
6th "	41 85	13th "..... 28 50	19th "..... 17 80	25th "..... 30 00
7th "	48 10	14th "..... 16 35	20th "..... 12 75	Total..... \$665 35
C'd forward....	\$245 95	C'd forward.... \$453 95	C'd forward.... \$555 15	

BALL ACCOUNT.

Showing Amount Received by sale of Tickets, etc:

J. B. Peirce.....	\$27 00	Brought forward.....	\$1,281 00
B. McKeon.....	36 00	D. Farquharson	11 00
Robert Riddle (Ticket office).....	872 00	Chas. Ackerson.....	12 00
H. Behre.....	33 00	N. P. Hopkins.....	1 00
Geo. Sturdivant (Clerk for distrib'n).....	243 00	Wm. McKibbin.....	10 00
J. A. Pritchard.....	13 00	A. Buswell.....	2 00
Dinsmore.....	7 00	C. W. M. Smith.....	1 00
A. Dreyfoos.....	4 00	Chas. R. Steiger.....	50 00
W. W. Willis (Band).....	13 00	Percentage on Restaurant proceeds...	39 00
C. B. Porter (Agent).....	25 00	Bar.....	40 00
D. R. Coleman.....	8 00	Hat Room.....	48 75
Carried forward.....	\$1,281 00	Total proceeds of Ball.....	\$1,490 75

FOURTH INDUSTRIAL EXHIBITION

BALL EXPENSE ACCOUNT.

DECORATIONS.....	To cash paid Collie & Meyer for Decorations.....	\$12 00
" "	Restaurant for Musicians' Supper.....	12 00
GAS	To cash paid Gas Company for Gas.....	128 53
MUSIC.....	To cash paid W. W. Willis (Band).....	\$294 00
" "	Wm. B. Frisbie, do.....	138 00
ADVERTISING.....	To cash paid California Democrat, advertising.....	432 00
" "	Morning Call, advertising.....	22 00
" "	Hebrew, advertising.....	30 50
" "	Alta California, advertising.....	10 00
" "	Bulletin, advertising.....	47 00
" "	American Flag, advertising.....	40 00
" "	American Flag, advertising.....	43 00
PRINTING.....	To cash paid Wm. P. Harrison, printing.....	192 50
" "	Towne & Bacon, printing.....	118 50
" "	Thompson & Co., printing.....	33 50
" "	Californian, printing.....	5 00
BILL-POSTING	To cash paid Way & Keyt, bill-posting.....	3 00
ROSETTES.....	To cash paid Mrs. Norcross, for Rosettes.....	160 00
RIBBON.....	To cash paid for Ribbon.....	13 12
LABOR & SERVICES.	To cash paid A. B. Greaves & Co., services in hat-room.....	6 25
" "	George Sturdivant, distributing Tickets and collecting.....	28 75
" "	Wm Evatt, door-keeper.....	31 50
" "	M. Byron, cleaning up.....	5 00
" "	B. Cosgrove, do.....	12 50
" "	J. B. Bowers.....	2 50
" "	Charles H. Bartlett.....	13 75
" "	James Donahoe.....	16 25
" "	H. Maddin.....	13 75
" "	George Jacobson.....	16 50
" "	Jno. Dunn.....	12 50
" "	J. C. Lambert.....	1 00
LUMBER.....	To cash paid A. W. Macpherson, lumber.....	137 75
CARPENTERS.....	To cash paid John Clark, carpenter's work.....	220 00
" "	Discount on U. S. currency received for tickets.....	20 00
GAS-PIPES.....	To cash paid J. K. Prior, altering and adding gas-pipes.....	32 88
		\$1,564 14

BUILDING EXPENSE ACCOUNT.

LUMBER.....	To amount paid A. W. Macpherson, for lumber.....	\$7,020 00
LABOR.....	To amount paid John Clark, contract on building.....	\$3,600 00
" "	John Clark, raising dome.....	500 00
" "	John Clark, extra work, including Picture Gallery, Restaurant, internal arrangements, covering dome and roof, etc.....	2,417 50
SHAKES.....	To amount paid N. L. Drew, Saeramento, for Shakes.....	6,517 50
" "	Sacramento Valley R. R. do.....	1,105 45
FREIGHT, ETC.....	To amount paid R. & J. Morton, hauling shales.....	77 70
" "	Sehooner Caroline, freight on shales.....	20 00
" "	Steamer Washoe, freight on shales.....	18 00
HARDWARE.....	To amount paid Conroy & O'Connor, nails, etc.....	41 00
" "	Hawley & Co., for nails.....	1,262 15
" "	Underhill & Co., for nails.....	498 06
IRON WORK.....	To amount paid Wm McKibbin, for bands, bolts, etc.....	142 75
HAULING.....	To amount paid T. L. Elliott, for hauling lumber.....	689 06
DRILLING.....	To amount paid Murphy, Grant & Co., for drilling.....	171 53
" "	Lewis & Melville, for sewing drilling.....	408 53
GAS PIPES.....	To amount paid J. K. Prior, eontract on gas-pipes.....	25 50
" "	J. K. Prior, for water and add'l gas-pipes..	1,750 00
ROOFING.....	To amount paid N. P. Perine, for roofing cloth.....	571 19
" "	N. P. Perine, for painting roofing felt.....	2,321 19
" "	Hellman Bro., for roofing felt.....	640 00
MILL WORK.....	To amount paid Macdonald Bros., for mill work.....	304 50
" "	James Brockaw, for mill work.....	780 00
TIN WORK.....	To amount paid George W. Snook, for tin and zinc work.....	217 27
" "	James Brockaw, for mill work.....	412 59
GLASS.....	To amount paid Cameron, Whittier & Co., for glass, color, etc.....	425 08
		486 83
		\$21,986 46

SUNDRIES AND RUNNING EXPENSE ACCOUNT.

SAFE.....	To amount paid Russell & Irwin Manufacturing Company for damage to safe.....	\$5 50
" "	L. B. Beleher, for hauling safe.....	5 00
" "	R. & I. Mf. Co., for screw hooks.....	2 25
" "	Locke & Montague, for kettle.....	\$12 75
" "	Heywood & Coleman, for oil.....	4 75
		3 50
	Carried forward.....	\$21 00

SUNDRIES AND RUNNING EXPENSE ACCOUNT CONTINUED.

	B. ought forward.....	21 00
STATIONERY.....	To amount paid William B. Cooke, for stationery.....	18 00
" "	H. H. Bancroft & Co., for stationery.....	6 75
PAPER.....	To amount paid Wightman & Hardie, for blue paper.....	15 00
" "	Geo. J. Brooks & Co., for paper.....	11 25
BLANK BOOKS.....	To amount paid for blank books	5 75
" "	for Treasurers' cash and memo. books....	2 50
DUSTERS.....	To amount paid Kennedy & Bell, for dusters.....	31 50
BROOMS.....	To amount paid Armes & Dallam, for brooms.....	37 50
SUNDRIES.....	To amount paid Tubbs & Co., for sundries.....	25 24
	To amount paid Win. B. Davis & Co., for rollers.....	9 50
	To amount paid Kerby, Byrne & Co , for muslin.....	10 00
	To amount paid Chas. M. Plum, for carpet, etc.....	96 67
	To amount paid Geo. & W. Snook, for tin pole.....	12 00
	To amount paid for Revenue Stamps (in currency).....	6 00
	To amount paid J. Peirce, for chairs.....	289 00
	To amount paid discount on U. S. paper currency.....	489 54
	To amount paid J. H. Camp, for sewer.....	111 25
	To amount paid M. B. Page, for sprinkling streets.....	48 00
INSURANCE.....	To amount paid San Francisco Insurance Co., on policy....	127 85
" "	California Home Insurance Co., on policy..	95 95
" "	Firemens' Fund Insurance Co., on policy..	95 95
" "	Pacific Insurance Co., on policy.....	95 95
MACHINERY.....	To amount paid Palmer, Knox & Co., for shafting, coup-	
	lings, etc.....	251 09
" "	Goddard & Co., for engineers' work.....	170 25
" "	Vulcan Iron Works Co., for shafting, ma-	
	chinery, etc.	425 00
" "	Vulcan Iron Works Co., removing shafting..	89 60
" "	E. T. Steen, for use of shafting & grate bars.	112 18
" "	J. Macken, for exhaust pipe.....	40 75
" "	C. H. Harrison, for machine oil.....	7 50
BOILER.....	To amount paid California Steam Navigation Company, for	1,096 37
	freight on boiler.....	12 50
" "	R. & J. Morton, for hauling boiler.....	15 00
" "	Samuel Reynolds, for setting boiler.....	45 00
FIREWOOD.....	To amount paid Audefred & Male, for firewood.....	111 50
WATER.....	To amount paid San Francisco Water Co., for water.....	336 00
	San Francisco Water Co., for service pipe..	63 80
GAS.....	To amount paid San Francisco Gas Co., for gas:.....	2,544 37
MUSIC.....	To amount paid Win. B. Frisbie (band).....	1,902 00
PAINTING.....	To amount paid — Worthington, for painting.....	79 65
" "	A. & T. Torning, for painting.....	22 97
" "	Lwrence & McQuade, for painting.....	6 00
WHITE-WASHING ..	To amount paid Wheelan, for white-washing.....	20 00
" "	Labor, color-washing picture galleries....	100 00
PRINTING	To amount paid J. Thompson & Co., for printing.....	192 00
" "	Towne & Bacon, for printing.....	55 00
ADVERTISING.....	To amount paid Hebrew newspaper, for advertising.....	3 00
" "	Wine, Wool and Stock Journal, for adv...	10 00
" "	California Ledger, for advertising.....	21 00
" "	Californian, for advertising.....	18 50
" "	California Democrat, for advertising.....	23 00
" "	American Flag, for advertising.....	81 50
" "	Argus, for advertising.....	47 00
" "	Morning Call, for advertising.....	114 50
" "	Spirit of the Times, for advertising.....	20 00
" "	Mining and Scientific Press, for adv'g....	36 50
" "	Foreign newspapers.....	72 00
" "	Daily Dispatch, for advertising.....	35 00
" "	Sunday Mercury, for advertising.....	15 00
" "	Nuevo Mundo; for advertising.....	5 00
" "	Golden Era, for advertising.....	27 00
" "	Alta California, for advertising.....	102 00
" "	Evening Bulletin, for advertising.....	116 00
" "	L. P. Fisher, advertising agent.....	173 00
" "	F. J. B. Thompson, adv'g in street cars...	15 00
" "	Way & Keyt, for bill-posting.....	20 00
EMPLOYEES.....	To amount paid N. Ruble, night watchman.....	18 00
" "	W. G. Lovell, night watchman.....	15 00
" "	D. L. Perkins.....	43 12
" "	H. E. Adams.....	9 00
" "	Thomas Finn.....	6 00
" "	P. B. Comins.....	35 12
" "	Geo. Sturdivant.....	35 00
" "	Robert Riddle.....	82 50
" "	Wm. Evatt.....	120 00
" "	John Evatt (presented).....	50 00
" "	Officer Ward (previously \$45.85).....	79 15
	Carried forward.....	\$492 89 \$9,222 31

* SUNDRIES AND RUNNING EXPENSE ACCOUNT CONTINUED.

	Brought forward.....	\$492 89	\$9,222 31
EMPLOYEES.....	To amount paid Officer Jehu.....	44 85	
" "	Officer Horton.....	125 00	
" "	J. F. Sterling.....	18 00	
" "	B. McKeon.....	18 00	
" "	Employees (by J. A. Pritchard).....	2,332 01	3,030 75
PETTY CASH.....	To amount paid petty cash (by Jos. Britton).....	351 30	
" "	petty cash (by C. B. Porter).....	5 50	356 80
CROCKERY.....	To amount paid R. A. Swain & Co., for loan and breakage of crockery.....		59 43
FLOWERS, ETC....	To amount paid Collie & Meyer, for evergreens.....	600 00	
" "	John O'Hara, for plants and flowers.....	51 25	
" "	James O'Donnell, for plants and flowers...	55 50	
" "	C. L. Remier, for plants and flowers.....	37 00	
" "	H. A. Sontag, for plants and flowers.....	45 00	788 75
AMERICAN FLAGS..	To amount paid J. J. Marks, for American Ensign.....	16 00	
" "	John C. Bell, for flag lost.....	7 50	23 50
OPENING AD'DS....	To amount paid H. B. Platt, for use of hall for Opening Address.....	75 00	
" "	Blair & Co., for services on night of do... ..	27 00	102 00
SPURIOUS COIN....	To amount lost on spurious coin received at ticket office.....		2 50
DIPLOMAS.....	To amount paid Britton & Co., for diplomas.....	400 00	
	To amount paid discount on silver deposited in bank.....		1 00
	Total for sundries and running expense account.....		\$13,903 61

Considerable labor was occasioned by complying with one of the rules governing the Treasurer, which requires that "all moneys should be deposited in bank, and paid out by check only," when to have *strictly* complied with such a rule would have entailed a loss of at least \$260 by depositing the amount of silver received at a discount of one per cent. To keep the bank account as required, deposit checks had to be taken for all silver paid out ; also, the bank account will fall short the amount of discount on currency, which had to be entered on a par with gold to make the ticket and cash accounts correspond. All of which is respectfully submitted :

JOSEPH BRITTON,
W. H. KNIGHT,
W. H. PRITCHARD,
P. J. O'CONNOR,
E. NUNAN,
P. B. DEXTER,

H. F. WILLIAMS,
A. S. HALLIDIE,
H. D. DUNN,
C. R. STEIGER,
E. N. TORREY,
W. W. HANSCOM.

WM. PATTON.

Executive Committee.

OPENING ADDRESS

Delivered by the Hon. John Conness before the Mechanics' Institute, at Platt's Hall, San Francisco, September 3d, 1864.

MR. PRESIDENT, LADIES AND GENTLEMEN:—In one of the last public declarations of Sir Robert Peel, he expressed the opinion that England owed to her mechanical industry the power with which she had passed through the wars of half a century—"that furnished her exchequer, that sustained her credit, floated her triumphant navies, and placed, for a time, in her hands, the trident of the seas." The history of mankind proves that the foremost races of men—those who have controlled the civilized world, and who became great and prosperous, and impressed their ideas, habits, and civilization upon other races and peoples—were only foremost, great and prosperous because a large proportion of their people were engaged in agriculture and the mechanic arts. The people of the loyal States have for three years sustained a war for the restoration of the Union, unparalleled in its magnitude, and at a cost which seems fabulous; yet the statistics from the census prove that the total cost of the war, as exhibited by the public debt on the first of the present month, could be paid from the profits on agriculture and increased mechanical productions, as shown in the increase of wealth during the decade from eighteen hundred and fifty to eighteen hundred and sixty, and still leave a balance for the prosecution of the war for six more years at the same rate of cost; and then the people of the loyal States would, in the aggregate, be as wealthy as they were the year California was admitted into the Union.

I call your attention to these facts that we may the better appreciate the part we, as a portion of a great nation, are performing, and the progress we are making in agriculture, and in new and improved mechanical productions, as exhibited under the auspices of the Society which has called us together. With the educated and intelligent farmer and mechanic, unpropitious seasons and the disarrangements consequent upon war seem to act but as incentives to renewed exertions for the invention of labor-saving machinery, and the profitable exercise of industry in new channels.

The clouds of Winter withheld their necessary and nourishing rains, and the harvest of gold and grain is light; but men's thoughts have been turned to new means to lessen the expense of plowing, planting, gathering, and cleaning their crops, and the product is before you in the wonderful machinery on exhibition. Wild speculation and sudden haste to be rich, incompetent and extravagant superintendence, fictitious companies and fraudulent stock, have depressed the mining interests of our State, yet the inventive, practical mechanic and miner have been at work in the discovery of improved applications of motive power; new processes for the saving of labor in driving tunnels and sinking shafts; in new pumps, for the draining of mines; in new modes for the reduction of ores, and new processes for separating the precious metals from their obdurate matrices.

In the loyal States directly affected by the war, it was supposed there would be depression of business, stagnation of industry, and cessation of invention. The reverse is the fact. With the exception of the manufacture of cotton—which is depressed from the lack of material—all others are more prosperous than before the war. A recent intelligent writer, in

commenting upon the fact that there were issued from the Patent Office, from the first to the tenth of May of the present year, two hundred and eighteen patents, re-issues, and designs, says: "Save in cotton manufacture, there is hardly one other that is not busier than it has been in years gone by. Iron is in such demand that producers of it command their own prices; paper is the same, woollen goods are the same; wearing apparel of every sort is costly; and this, in spite of all that inventors are doing to reduce the price, by making more of it in less time than was formerly required. The progress of invention during the war has been steadily increasing, and it is difficult to tell what the consequences would have been to the nation had not the people lent their inventive skill in the hour of trial. Without the Monitor, we should have been overwhelmed by the Merrimac; without the shot and shell of Stafford, Parrott, Sawyer, Shenkl, James, Hotchkiss, and others, we should have suffered many a defeat; without Sharp's rifle, the Burnside breach-loader, the Spencer and Henry repeating rifles, the efficiency of our arms would have been seriously impaired," and the crowning glory of the recent contest, by which the pirate ship Alabama met a pirate's fate, was in the superiority of the Dahlgren over the Blakely gun. The fact that so many men have been called from agricultural and mechanical pursuits to the direct service of the country, has compelled the invention and adoption of labor-saving machinery.

The Commissioner of Patents, in his report for eighteen hundred and sixty-three, in commenting upon the increased activity in the invention of agricultural machinery, consequent upon the withdrawal of men from the pursuits of peaceful labor, says he learns, from reliable sources, that there were manufactured in the loyal States during that year upwards of forty thousand harvesters, while the number in process of manufacture required for the harvest of the present year is estimated at over ninety thousand machines. He adds: "Machines for thrashing and cleaning grain have received a large share of attention, and have been rendered so complete that the grain is now thrashed, cleaned, measured, bagged, and the straw stacked, at one operation. Improvements have also been made in the machines, by which the dust is taken up and conveyed away, and also by which the bands are cut and the sheaves fed into the thrasher. Indeed, throughout the entire class of agricultural machinery, there appears to be an increased activity in the effort to substitute labor-saving machinery for manual labor, and with beneficial results." The exhibition of the invention and skill of the farmers, mechanics, and miners of California, which to-day has been collected together in this great city, will prove that our State is not behind her loyal sisters in all that shows studious thought and skillful labor. Who that landed on these shores fifteen years ago, and saw scattered through the State the evidences of a pastoral civilization—which, existing for two hundred years, had made no advance in agriculture or mechanics—would have dared predict this great city, its foundries, machine shops, woollen mills and other manufactures, its opulent commerce; and, enlarging the view, the broad acres of agricultural productions, the vineyards and orchards, the quartz and lumber mills, and the thousands of miles of mining canals? All these are the product of skilled and intelligent labor, and the men who have produced them may well feel a just pride in their work.

It has been well said, that the dignity of labor is in its results, and not in the form of employment. While we may feel a just pride at the progress we have made, it should not be forgotten that we started in agriculture and mechanics at the highest point which others had attained. We had among us intelligent and educated men of all the civilized nations. We had the benefit of all the knowledge and experience of our own and other peoples. We found a new country, and contact and interchange of thought with men of all sections and various systems of education, tended to release the mind from the fetters of old restraint and prejudice, and the conservatism of conventional custom, and our farmers and mechanics were ready to adopt all that was new, provided it was good and accomplished the purpose intended. If the most sanguine pioneer would have been considered insane had he predicted the evidences of progress, prosperity and wealth which are displayed before you to-day, who would dare to foretell what inventions, what improvements in machinery, what evidences of progress in agriculture, what specimens of varied manufacture, will be gathered for exhibition in this city, when fifteen more years have passed away? I believe, when that time shall have arrived, California will be known as a manufacturing as well as an agricultural and mining State. We have all the facilities to make us a manufacturing people. We have coal in our hills, waterfalls and wood on our mountains, iron and other ores in abundance, and unsurpassed agricultural facilities. We are advantageously situated to control the commerce of the northern Pacific, and to supply the people who will soon fill the country on the north and south of us. We have a climate which seems more nearly adapted for the healthful labor of man than any other on the earth; our system of law opposes monopolies, and gives the greatest freedom and security to individual

enterprise. The discovery of the precious metals in the interior of the continent, at various places beyond our eastern border, is attracting a population which will become permanent, and whose manufactured articles of consumption can only come from this State, when the Pacific Railroad, which our wise Government is doing so much to build and foster, shall have crossed the Sierra Nevada. We are situated at so great a distance from the manufacturing centers of the world, that the cost of transportation is equivalent to a profit. The necessities of the country growing out of the cost of the war, compel a tariff which prudent legislation will not materially reduce, and which offers inducements for the investment of capital in manufactures. In the estimates of the income of the country for the present year, the receipts at the Custom House in this city were placed at eight millions of dollars. While we cannot but be pleased that we are paying so much toward the support of our Government, we should remember that at least one-third of this sum is paid as a tax on articles which in a few years will be produced and manufactured in this State. In this connection let me direct attention to the recent legislation by Congress, by which high specific duties are imposed upon the wines and brandies of foreign countries, while like products of our own favored State are nearly exempt from burden; the necessary and inevitable result of which must be that we shall soon furnish a bountiful supply of these valuable products for the consumption of our own country as well as for exportation. The necessities of our position, the laws of trade, and the habits and education of our people, all tend to make California a manufacturing State. Observation and reflection have taught me that the most depressing influence on our progress is the unsettled condition of our land titles. Agriculture is the foundation of civilized society, and successful agriculture is based upon the peaceable ownership and possession of the soil cultivated. It seems impossible that even with the law's slow delays, many more years can pass before the title to our lands will be finally determined, and these lands be subdivided and sold by the claimants by the Government, to the people who will occupy and cultivate them.

I believe, also, that the time has arrived when the prosperity of the State demands that the miner should be the owner in fee simple of his claim. He is at present but a trespasser, working, it is true, by the cheerful consent of the Government; but still a trespasser, liable to unfriendly legislation (not that legislation is intended to be unfriendly,) but it seems impossible that his position and wants can be understood, except by direct observation and association.

I believe that the laws and customs adopted by our mining population for the settlement of the rights of possession and occupancy should be confirmed by Congressional legislation, and a law be passed providing for the sale of the mineral lands to the persons who, under our laws, have the right of possession. This done, our mountains will have a permanent population, mining will be conducted as a business by system and order, capital will seek investment in mining enterprises, school houses, farm houses, and churches will take the place of the log cabin and the tent, and we shall have a steady, industrious people, whose wants and necessities will keep busy our foundries, machine shops, and factories. The society whose exhibition is to-day opened to the public, is peculiarly under the direction and control of mechanics; it is the product of their thought, the reflex of their intelligence, which is to excite our admiration. Although it must be conceded that agriculture is the basis of the whole superstructure, I feel a direct interest in the working mechanic, his modes of thought, his habits and associations, the position he occupies as a member of society, and the influence he can exert in the advancement of civilization.

I know what it is to give my daily toil for years in the acquisition of a mechanic's trade. I know what it is to fill every position from apprentice to foreman. I know the conditions that almost separate the mechanic from general society. The demands of occupation are peculiarly exacting upon him. The competitions of productive industry account for this exactiou, which, to a certain extent, separates him from intercourse with society. The master mechanic, attuned by early habit to those exactious and demands, pursues his calling too often to the neglect of enjoyments and other duties. The operative mechanic, worn by daily toil, seeks rest and recuperation in the intervening hours not occupied by labor. His opportunities for intercourse with friends and neighbors are few. In this way society often becomes classified by force of circumstances and the demands of the laborious and useful professions. Vain men and women sometimes attempt classification, based solely upon wealth and the assumed respectability of idleness; but in a Government like ours all such attempts must fail. The poor of to-day represent the wealth of to-morrow; and thus, so far as wealth and its advantages are concerned, an equilization is continually going on, which never fails in its effect. The man or woman who has most intelligence, most energy, the deepest love of humanity, and applies these great gifts and qualities to the most useful purposes, becomes, in our time, the greatest hero or heroine, and the most peerless ornament. Such may not be suddenly acknowledged; but let none fear their

legitimacy of empire, for God has ordered that they shall reign and rule in the moral kingdom. Now, try the mechanic by this great test. Trace him out, who, in the stillness of the midnigh hour is engaged in the closest analysis and calculations of the laws that govern the application of force to matter, the result of whose labor is to astonish the world again by an increase of its productive industry, by immense additions to its wealth, and a more bounteous supply for human wants. Observe him, who day by day, dexterously plies the implements of his trade, satisfied with his slender earnings, and applying them to the relief of family and kindred, but ever looking upward and onward to the goal that his manhood marks as his proper station. Who can question his elevation and superiority? It is a mistake, if not a crime, to discriminate too severely against those of our race who are not endowed with equal intellect and intelligence with ourselves. It would be a strange society where all the members were equally intelligent, equally moral, and equally adapted to the highest grade of human refinement and elevation. The office of reformer and philanthropist would be gone, and precept and example would alike be lost. Although we all have an ideal standard, yet its universal attainment would seem to be impracticable, if not impossible; and we are brought back to the conviction that One wiser than we are has beneficially arranged the elements that go to make up human society.

What are called the polished members of society are rarely known in its great conflicts, out of which are evolved radical changes that strike at its lowest foundations. The great conflict now going on in our country between those who would rule or ruin, and those who would and will preserve the work of the great fathers, is maintained for the most part by the uneducated and laboring masses of our population.

When Burnside's column left Annapolis for the Rappahannock, last spring, I saw the brave fellows who composed it pass through the National Capital. I made it my business to observe them closely in this connection. The bronzed face of the Caucasian and the black face of the Ethiopian together made up that human tide which, with measured flow, went down to death for liberty! That great column was not, of course, without rare intelligence, but it also contained the untutored, unselfish men—the rough, unhewn virtue of our nation—and I thanked God that all were not sufficiently refined to remain at homes of ease and affluence while country, humanity, liberty and law demanded human sacrifice.

I do not wish to be understood as undervaluing education, for on the contrary I believe that without it there can be no progress, no advancement, no permanent security for civil liberty. No part of our population has so great an interest in maintaining public common school education as the mechanic. While all the years from youth to manhood are generally appropriated to education by the affluent, the education of the children who are to enter upon mechanic trades must be completed at a much earlier period. The base must thus be laid in early youth upon which in later years, during hours often stolen from sleep, the superstructure is to be built which is to culminate in an intelligent and useful after life. But no member of the community can release himself from the duty of providing the means of education for all. We are all of one family, and are all interested in the welfare of each other. The usefulness, the fame, and the greatness of any, belong equally to all. The strength, the power, the nobility of the greatest and best man belong to and inspire every other member of society. The poverty, the weakness, the disgrace of any, are equally distributed through the community. No man can absolve himself from this common bond and responsibility; to attempt it would be to isolate himself and become a voluntary outcast. Why do the people of our State open wide their purses, and send through the Christian and Sanitary Commissions their treasures, to the relief of men whom they never saw? They are impelled by the divine law of duty, and the common bond of humanity, and their own happiness is promoted by obedience to these demands. I invite, especially, the attention and efforts of mechanics to every step proposed in the direction of universal education. The benefits to society from education are marvelous already. We often hear persons who have a habit of condemning their own age as inferior to the past, complain that we now have no great minds—no great intellects; in fact, they assert that the race of mental giants has passed away, and we have pygmies in their stead. I do not hesitate to say that we have now more genius, more intellect, more real greatness, engaged in the production of labor-saving machinery alone, than any past age can be shown to have had engaged in all capacities put together.

It is not, however, in this line only that this age excels all others. The merchant of a half century since would be astonished if he were launched upon the market of to-day. It is no longer a great venture to send ships to sea; their time can be calculated, and the condition of trade at their destination known. The great merchant of the past would cut no figure in the commerce of our time.

In the curative art, the whole practice has been changed, and human ills are alleviated or removed with almost unerring success.

The pulpit is liberalized, and no man thinks of holding his neighbor up to a particular standard of belief. The sects use reason and generosity in larger quantities, and all are becoming friends. The grasp of the statesman is wider than it was—it now takes in all humanity, and proposes a greater extension of human rights everywhere. It is, in this connection, a noticeable fact, that even where—as in the case of Louis Napoleon—wrong is contemplated, it is predicated upon the improvement of the general condition of the victims. All society is becoming humanized and elevated.

The general diffusion of education has so enlarged man's capacities, that to be distinguished is no longer a distinction. The average is so much higher that we are deceived by the standpoint from which we look. All this, and much more, is due to the extension of common school education during the past half century, and gives us splendid promise for the future, if we but do our duty.

To those of us who came to these shores on the discovery of gold, half the average life of man has passed away. To us it was a strange land ; to the next generation it will be the native land. The pride we feel in its progress, its prosperity, its advance in all that goes to make a higher civilization, will be theirs by birth and inheritance. Born to love their country, if we perform our duty to them, they will advance its growth to greatness. Under the guardianship of the Almighty, I think the time is near when the supremacy of the National Government, and the justice of its rule, will be acknowledged throughout the whole land. Through bloody war and all its horrors, by loss of friends and relatives, and by homes made desolate, God has taught this people the virtue of patriotism and the value of free labor. In the peaceful years to come, that are left to us, let our children be also taught these deep lessons, and let us not forget to impress upon them the dignity and true nobleness of labor, so that, when we shall have passed away, they will be the leaders in organizing the grand future of humanity—the legitimate product of education, religion and liberty.

REPORTS OF THE EXAMINING COMMITTEES

Chosen by the Exhibitors in the several departments of the Exhibition, as approved by the Executive Committee.

Class I.

Agricultural Implements and Machinery.

COMMITTEE:

D. L. PERKINS, M. HUNGERFORD, A. R. MARDEN.

Report.

The Committee of Examination in this department recommend awards as follows:—

Premium to J. Price, of Petaluma, for best Hay Press.

Premium to H. R. Huie, of Alameda county, for best Gang Plow.

Premium to M. Munral, for Wine Press. [The Executive Board do not find the name of Mr. Munral upon the records as an exhibitor, and will accordingly hold the premium for identification.]

Premium to J. B. Barker for model of steam power machine, designed for making extensive earth excavations and embankments.

Premium to A. Hunter for Patent Grain Separator.

Premium to W. Wadsworth, of Sacramento, for patented "American" Soil Tiller.

Premium to Joel Halstead, for Wine and Cider Mill, with Press combined.

The committee distinguish by honorable mention—

The Hay Press exhibited by G. C. Paine.

The Patent Seed Planter and Cultivator exhibited by D. & H. A. Winter.

The Gang Plow exhibited by L. Holloway.

And the Wine Press and Mill, combined, exhibited by E. W. Walton, of Amador county.

J. D. Arthur & Son, San Francisco, exhibit a finely finished Reaper of the Seymour & Morgan pattern, a model of the "Giant," and an assortment of plows—all of Eastern manufacture.

Hawley & Co., San Francisco, exhibit one of the "Buckeye" Mowing Machines and a number of patent plows—imported.

A Cotton Gin, furnished by the firm of Melrose, Zorn & Co., was in daily operation, during the Fair, upon samples of cotton raised by Jackson & Johnson, on the Sacramento river (where, with an experience of two years, under disadvantages, they believe they can yet raise it successfully and profitably). The cotton-raising enterprizes at the Islands and in Mexico, if not in California, will make a market here for the indispensable Gin, which can as well be built here as imported.

[Premium awarded to Z. Sikes, of Santa Clara, for Gage's Roller and Grain Drill; to Wm. Saunders, for Improved Whiffle-Trees; and to F. B. Lamb, for Sheep Shearing Machine, cannot be allowed by the Executive Board, the articles named having been entered as of Eastern manufacture. They will, therefore, rank with articles honorably mentioned.]

Class II.

Quartz Mining Machinery.

COMMITTEE:

W. T. GARRATT,	OTTOVIANO GORI,
H. P. WAKELEE,	GEO. JOHNSON,
E. M. RADCLIFF,	O. BELDEN.

Report.

If any evidence were needed to show the importance of the great, growing, and, we may add, vital interest on the Pacific coast, MINING, we have only to point to the numerous machines exhibited in this department of the exhibition just closed, all of which possess great merit, and many are so similar in their construction that in some cases our task to determine to which the premium should be awarded has been most difficult.

Quartz Crusher or Rock Breaker.—We award a premium to W. W. Hanscom, for his crusher, which, in our opinion, offers the greatest facility for adjustment, to reduce the ore fine or coarse, as may be required, and which is the principal distinction we can draw between this and the well known Blake Crusher.

To Moore's Improved Howell Crusher we award a premium. The result of experimental running of this machine at the Exhibition, showed that it reduced quartz to an impalpable powder at the rate of about one ton per hour. The inventor claims that "the action of the machine is rapid, safe and effective, and runs with nine-horse power to crush fifteen hundred pounds of quartz per hour. The shoes on the arm can be replaced in half an hour, at a very small expense. The machine requires no foundation to stand upon, but can be placed on a common floor, and can be packed on mules, as the heaviest piece weighs only 300 pounds. If the quartz is required to be pulverized only to the ordinary fineness to enter the grinding pans, a crusher can be built to reduce one ton of quartz per hour, to be driven by a six-horse power engine."

To W. D. Farrand we award a premium for his Amalgamator.

Honorable mention of Wheeler & Randall's, Varney's, and Hepburn & Peterson's "Reducers and Crushers."

FOURTH INDUSTRIAL EXHIBITION

All these pans are in practical use, and each has its advocates among the miners.

E. B. Johnson presented a model of a very ingenious machine, under the name of the "Novelty Amalgamator." We regret it did not appear in larger size. As a model, its practical value could not be ascertained.

To J. B. Baux (Baux & Guiod's Separator and Amalgamator) we award a premium as separator.

To E. B. Prater we award a premium for his Concentrator.

Honorable mention of Varney's, Hepburn's, and Hunter's Separators.

To J. Brodie we award a premium for his patent lining of the "Freiburg Amalgamating Barrel," which consists of blocks of wood set on end, thereby greatly increasing its durability and effective operation as an amalgamator.

To W. W. Dunn we award a premium for his Rock Drill.

To Oscar Lewis we award a premium for his model of Wheeler & Randall's Amalgamating Pan; the workmanship of which is superior to anything we have seen of the kind.

Honorable mention of R. S. Eells' model of his "Percussion Quartz Mill."

Honorable mention of B. Fauchery's Quartz Grinder, for working wet or dry. This, with his "Crocodile Quartz Crusher," forms a complete mill.

To J. M. Beth we award a premium as Reducer, in his Reducer and Amalgamator.

Honorable mention of Rix, Logan & Small's Trip Hammer Crusher.

All of which is respectfully submitted.

San Francisco, Oct. 8th, 1864.

Class III.

Manufacturing Machinery and Steam Engines.

COMMITTEE:

W.M. MCKIBBEN,
JAS. MOORE,

WM. SCHMOLZ,
C.C. BENNIS,

A. W. STRATTON.

Report.

The Exhibition in this department comprised a great variety of articles of substantial and beautiful workmanship, which bear ample evidence that we have passed the period of dependence on workshops abroad. The machinery, tools, models &c., adapted to a great variety of uses, the valuable inventions and new improvements, are in the highest degree creditable to the skill and resources of our home manufactures and mechanics.

J. Scoville—Exhibits a Portable Clamp Drill, which is well made, simple, practical, and in our judgment deserves a Premium.

Melrose, Zorn & Co.—Exhibit among other imported articles a Steam Gauge and a Counter, which are accurately and durably made.

Meeker, Jones & Co.—Exhibit an imported Patent Spoke Borer, well adapted for the use of wheelwrights.

Wm. T. Garratt, S. F.—Exhibits Brass Work. The stock in this lot embraces globe valves, water cocks, water gauges, steam whistles, hydraulic pipes, engine torches, hose couplings, Reeves' Improved oil globes, &c., &c. The various sizes and patterns of the articles enumerated, together with others, contributed to make this one of the most noticeable lots in the Exhibition. Mr. Garratt's globe valves are superior in style, durability, and safety, to any imported, and the rich metal, fine finish and quality of all his work will compare favorably with the work from any manufactory abroad, and attests the excellence attained in this branch of home industry. It should receive a Premium.

Conroy & O'Connor, S. F.—Exhibit a large assortment of imported vices, anvils, cast steel bells &c., &c., to-

gether with a Patent Chain Pully Purchase, which with one of the same pattern exhibited by Coffee & Risdon, was practically and satisfactorily tested by constant use in setting and adjusting the heavy machinery in the Exhibition.

Fargo & Babcock, S. F.—Exhibit one of Stoddard's Shingle Machines, which is worthy the attention of persons interested.

David Stoddart, S. F.—Exhibits a Blacksmiths' Drill of ingenious construction, compact and portable, designed to work either by hand or power. We consider it worthy of a Premium.

A. J. Frick, S. F.—Exhibits a Patent Packing and Filing Machine, which performs its work advantageously and well.

G. W. Guion, S. F.—Exhibits a large and full assortment of imported tools for almost every mechanical trade.

J. Hendy, S. F.—A Circular Gang Saw Mill. This is one of the most interesting machines in the Exhibition. Two large Circular Saws working upon parallel horizontal shafts, set one above the other to cut in the same line, enable it to saw logs of great thickness, while the horizontal gang of six saws, working on an upright shaft, operate in advance of the perpendicular saws and before the piece being cut is severed from the log. The saws in the horizontal gang can be adjusted to cut any required thickness of scantling, which, being firmly held to the solid log until severed by the vertical cut cannot spring or bend to bind and obstruct the saws. An original arrangement for trueing the saws when running, is attached to the frame, and is worked by a lever without danger of injury to the operator.

It is claimed that the mill is capable of turning out 25,000 feet of inch boards or 30,000 feet of scantling every twelve hours, making more lumber from the log at less proportionate cost of labor and power than any other. It is due Messrs. Hinkley & Co., the builders, that the committee should bear testimony to the admirable proportions and fittings of every part of this substantial and highly useful piece of mechanism, and we recommend a Premium.

Wm. Berney, San Francisco.—A Patent Saw-Filing Machine, which performs the operation of filing circular saws more accurately and expeditiously than it can be done by hand. We would award it a Premium.

N. W. Spaulding, San Francisco.—Two Patent Tooth Circular Saws—very appropriately set for exhibition on Hinckley & Co.'s mill. The preference which Mr. Spaulding's tooth saws have found with mill men and manufacturers of lumber, sufficiently attests their superiority, the advantages being a saving of cost for files and time in keeping them in order, while the original size of the saw is never reduced by wear, never requires "gumming," is not liable to spring and heat, and from the better cutting form of the teeth, will run with less power and do better work than the ordinary saw. The teeth are of better material than is used in the plate, their temper can always be exactly adapted to the requirements, and when broken or worn they can be readily extracted and replaced, without strain on the plate or removing it from its seat on the shaft. Mr. Spaulding is well entitled to a Premium.

Pacific Iron Works, San Francisco.—Green's Patent Steam Engine. This engine, worked for running the machinery at the Fair, was manufactured by Goddard & Co., under the patent of H. J. Green, of Providence, R. I., for a variable cut-off. The cylinder is 16 by 36. The mechanical arrangement is very simple and effective, taking the steam from the steam-chest on top of the cylinder through ports and a common side valve, the valves on each end of the cylinder being worked by an independent shaft and arm, used only for the steam, the exhaust being an independent valve in the side of the cylinder driven by a separate eccentric and rod. This arrangement leaves the steam valves independent of each other and of the exhaust, and their movement entirely under the control of the governor. The effect of this arrangement is to measure the steam, and admit it at each end of the cylinder in small quantities, as is re-

quired by the work to be done (not withdrawing the steam, as is done by the ordinary governor valve, but admitting it at nearly the same pressure as that indicated by the steam guage on the boilers.) It is claimed by the inventors and the manufacturers of this engine that it will save fully thirty per cent. of fuel on a given amount of work as compared with ordinary engines.

The committee had no opportunity to test all the claims thoroughly; but the correctness of the principle is so obvious, and the working of the engine so perfect, that we do not doubt it offers a great desideratum in the way of steam power, and particularly on the Pacific coast. The engine worked effectively and economically during the Fair. The fine proportion, superior finish and perfection of workmanship on this engine deserve a Premium.

Van Winkle & Duncan, Sac.—Patent Tire Upsetting Machine. Answers the purpose well, and is a valuable machine for blacksmiths' use.

Devoe, Dinsmore & Co., S. F.—A Sugar Mill, model, interesting to grinders of Sugar Cane.

Peck & Venard, S. F.—Patent Preparation for cleaning steam boilers. Will require a practical test in both new and old boilers, to determine its value, which is very great if it effects what is claimed.

W. D. Root, S. F.—Tire Upsetter and Punch combined. Needs improvement.

Z. Rice, S. F.—Sample case of Lock work and mechanics' implements of practical utility.

J. Bien, S. F.—A Combination Lock. Effective and simple in arrangement and an excellent piece of mechanical work, deserving a Premium.

D. Dodge, S. F.—Two of Tapley's self-feeding Hand Sawing Machines (imported). They operate perfectly, and would be useful in the shops of most wood workers.

H. S. Smith, S. F.—Two Sets Dunbar's Patent Piston Packing Rings. This packing has been tried and gives entire satisfaction.

Andrew Stevens, Vulcan Iron Works, San Francisco.—Piston Packing Rings. A California invention, applied to a number of engines in this State, and giving satisfaction in every case. One great advantage steam packing has over springs is, that it is entirely self-acting, and avoids the danger of inexperienced men cutting the cylinders and using up power by setting up the springs too much.

Premium.

Pacific Iron Works, San Francisco.—A Bryan Five-Stamp Battery. Built in a very substantial manner, and provided with all the latest improvements.

Reeve's Improved Oil Globe, for oiling cylinders under steam pressure. By turning the handle of the plug in an upright position, the pressure of the steam and springs seal the valve, cutting off the communication between the cylinder and globe, when the globe is filled with oil by turning the handle down, and the communication is cut off between the cup and globe.

The eccentric upon the plug is brought to bear on the stem of the valve, which unseats it, and may be so graduated as to admit more or less oil, as may be desired.

Premium.

A. S. Hallidie & Co., San Francisco.—Improved Wire Rope Machine, invented by Mr. A. S. Hallidie, for the manufacture of wire rope and cordage, and of wire submarine telegraph cables.

It is different from any machine of the kind heretofore employed; and on examination, in actual operation, we find very many novelties in detail, while the general arrangement of the machine itself is entirely new. It possesses several important advantages over the best machine of this class. The bobbins which contain the wires (there are seven in the machine exhibited) are placed in horizontal frames, in a line immediately in front of one another, and, with the exception of the revolving caused by drawing off of the wire, are motionless.

[Remark.—In the latest improved machines the bobbins are placed in vertical frames, and revolve at a great velocity around a center bobbin.]

By this arrangement the attendant can examine the

bobbins and wire at any time without stopping the machine, and the frame of the machine under examination being no larger than sufficient to revolve free of the bobbins, offer a resistance to the atmosphere in proportion to its diameter, which is less than one-sixth of the vertical machine of the same capacity.

In the machine exhibited, the cord or rope is formed by the frame, which is light and simple, revolving around the bobbins, and inside a series of anti-friction pulleys. The wires, after leaving the bobbins, pass through a hollow spindle in the center of the frame to its outer circumference, then along the length of the frame, being guided on its way by means of small pulleys or guideholes to the "top" or "former," when they come together, and as the frame revolves the wires are laid together in the cord. The cord then passes half around a horizontal sleeve, to which is attached a register, or indicator (this ingenious register is accurately made by J. Roach), which registers the length of the cord as it is made; it then passes to the drawing-off gear, regulating the lay of the rope, or the number of turns per inch, thence to the coiling up reel, which coils it up as fast as it is drawn off. The machine does its work well and expeditiously, running at a velocity of six hundred per minute, the machine contains 150 pounds of wire at a time, and is capable of making 10,000 yards of strand per day of ten hours.

We look upon it as a great improvement on the old style of rope-making machine, and are satisfied that with the same amount of power double the amount of work can be done in a much better manner, while almost any velocity can be attained in this machine with perfect safety, as nothing revolves but the light frame, and this is secured inside a circular disc, between which are placed anti-friction pulleys.

For laying the wire armor of submarine cable it is admirably adapted, the gutta percha core containing the copper conductor being so payed into the center of the surrounding wires as to be free from danger of contact, etc. It fully deserves a Premium.

E. T. Steen, San Francisco.—Reynold's Cut-off for steam engines. Is an Eastern invention; has been in use for a number of years in this State; is a good regulator, and has advantages as a cut-off.

P. Lamb, San Francisco.—Damp Regulator for steam boiler furnaces. Is a very ingenious invention to regulate the draft in the furnace of the boiler. It will save fuel and equalize the steam.

George Bowers, San Francisco.—Wilson's Tire Upsetter. Works very well.

R. L. Harris, San Francisco.—One model Improved Railway "Turnout," Mass. Is very good, and universally used in San Francisco.

N. B.—This committee recommend the award of a premium to S. Hill, agent, for Florence Sewing Machine, but the Executive Board, under the rule concerning the distribution of premiums to home competitors, cannot approve the award, which otherwise would be due.

Class IV.

Hydraulic, Hydrostatic and Pneumatic Engines and Machines, Turbines, Fire Engines, Pumps, Windmills, Etc.

COMMITTEE:

P. MURRAY, JOSEPH MOORE,	P. HUERNE, A. C. AUSTIN,	T. J. HUGHES, W. T. GARRATT.
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Report.

Your Committee upon this class would most respectfully submit, that they have attended to the duty assigned to them in examining the different articles entered under Class IV., and offer the following report:—

Hansbrow & Redding—Have on exhibition a hydrostatic or water pressure engine, of about 14-horse power. It has a cylinder 7 inches in diameter, with 14-inch stroke. With water at an elevation of 200 feet, it consumes one inch of water (miners' measure) for each horse power.

FOURTH INDUSTRIAL EXHIBITION

The principal feature in the invention consists in using water as an expansive agent, which is accomplished by a beautiful and simple mechanical device—viz: the application of air-chambers and compensating air-valves at each end of the cylinder, imparting an elasticity to the water by that means, and giving it a similar action to steam in the steam engine. The compressed air also causes the discharge of the water at stated intervals after it has done its work. This arrangement allows a much higher speed of piston than has before been obtained in engines of this kind.

After a thorough investigation of the principles of this engine, we find that as an economizer in the use of water, it surpasses any known water-wheel, either turbine or rotary; and we would recommend it in preference to any other water motor, where clean water at a high elevation can be had.

Premium.

Thos. Hansbrow—Has a number of sizes and styles of his celebrated “Challenge Pump,” which is so well known that this committee can add nothing to its laurels.

In the same case with the working model of the “Challenge Pump” is the bronze medal premium, awarded to it, over all other competitors, at the great World’s Fair, London, 1860. It has also taken the premium at all the fairs held in this State. It has one other merit to us, at least—that it is a California invention.

Mr. Hansbrow has also on exhibition a mining pump, the peculiar construction of which renders it better for the purpose intended than any other pump now in use, and which we would strongly recommend. Premium.

Capt. C. H. Harrison—Has on exhibition several of his Eccentric Pumps, capable of discharging from 100 to 2,500 gallons of water per minute.

The principal advantages are, that it is light and compact, very durable, and not liable to choke or get out of order. It has no valves and no packing. It can be run fast or slow; the faster it is run the more water it will discharge. The durability of this pump has been well tested, and for wrecking, or engineering, or any kind of heavy pumping, is considered superior to any other.

Mr. Harrison also exhibits one of Andrews’ Centrifugal Pumps and engine (for wrecking purposes), which, with his other pumps, enables him to discharge a very large quantity of water in a very short time, from ships or places where required.

Premium.

David Stoddart—Has on exhibition a steam pump possessing some very novel features, of his own invention. It bears a remote resemblance to the “Worthington,” being direct-acting, without crank-shaft or flywheel, the valve arrangement being controlled by a tappet arm. It is, however, entirely new in its mode of changing the steam valve, which is accomplished by the simple use of only four internal moving parts, and these seem to be beyond the possibility of derangement, and might endure for an indefinite period, never requiring any adjustment after leaving the manufacturer’s hands. The strength, simplicity and excellence of workmanship exhibited in this steam pump were fully tested by your committee, and we take occasion here to express the great satisfaction we found in witnessing its smooth and regular motion, against varying pressures, up to 250 lbs. to the square inch.

We found that it has no “centres,” as engineer’s term it; but so sure is the valve gear in its action, that it can be run as slow as one stroke in five minutes without stopping—in fact, it has no starting gear at all; the only operation required in starting it is simply to open the throttle valve. We are informed that this style of pump has been in constant use during one year past, for draining a mine at Mt. Diablo, forcing to a vertical elevation of 255 feet; and the pump on exhibition is to be applied immediately to the same purpose in another mine.

In conclusion, we may say that this steam pump is, in our estimation, superior to any of the same description that has ever before been in common use. Premium.

Gifford’s Injector—Manufactured in Philadelphia, Pa. and exhibited by David Stoddart, agent. The assortment of sizes presented, from No. 2 to No. 8, and also the Injector supplying the working boiler at the Pavilion, illustrate the invention thoroughly. This is comparatively a recent improvement in the means of supplying

boilers with water, and is certainly the most original invention connected with steam machinery which has been made public since the days of James Watt. It was produced by M. Henry Gifford, of Paris. It is now extensively used in Europe and America. Wm. Sellers & Co., of Philadelphia, are the sole manufacturers and licensees for the United States.

The samples on exhibition—not got up for show, but furnished from the ordinary stock of the agent—are of superior workmanship and elegant finish.

We have no hesitation in recommending this as a valuable improvement, and destined to be universally employed for its intended purposes.

High Pressure Water Wheel—Entered by Wheeler & McAuley—shows considerable ingenuity in its arrangements. The inventors claim for this a higher percentage of power from the water than can be had from any other wheel known, with the advantage of working any head or quantity of water with the same diameter of wheel—a result not usually obtained. They also claim the balancing of the pressure on the wheel and buckets, or valves, so perfectly, that the friction is reduced to a very small percentage.

If the rubbing surfaces of this wheel do not suffer from the grit or sand in the water, we consider it a very perfect wheel.

High Pressure Water Wheel—Entered by Mr. B. Fauchery, is a very neat, compact, and durable Turbine Wheel, and from the manner of balancing one wheel by the other, and the arrangements for setting up the faces as they wear, it looks as if it might be a serviceable wheel. The inventor does not claim for it as high a percentage as is claimed for some other wheels on exhibition, but claims that, for steady and continued work and ease of management it will, in the long run, give better satisfaction than if it was working closer and more liable to wear.

Premium.

Tyler’s Water Wheel—Eastern invention, and manufactured by Smith & Hanscom, of the “Golden State Foundry.” He claims simplicity of construction; that it is not liable to get out of repair, is adapted for high heads as well as low; cheapness with which it can be set up and put to running; not being liable to obstruction, muddy or dirty water can be used as well as clean. It has been in use in a number of places in the State.

Feathering Paddle Wheel—Entered by Felix Barbaires, of Benicia—is a new method of adjusting the paddles of a steamboat wheel, whereby the dip of the wheel may be varied to suit the draught of the boat, and also enables the engineer to enter the paddles at any desired angle.

There is considerable room for improvement in the steamboat wheels of the present day, and the feathering paddle has been tried to overcome some of the difficulties, but we believe it is the first time any plan so simple as this has been tried to alter the dip of the wheel. The gain in speed, by the use of the feathering paddles, has been fully proven; but hitherto, the first cost, and the expensive repairs to follow, has been the great obstacle to their adoption for general use.

Premium.

A. W. Stratton exhibits his Hydraulic Press Pumps of three cylinders. This is one that he uses for raising brick buildings. It was attached to a press to show how its enormous power could be applied for pressing hay, tobacco, cotton, or any other use where great power is required.

E. A. Atwood has on exhibition one of his self-regulating Windmills, running one of M. D. Lasswell’s pumps. This windmill is claimed to be the most perfect self-regulator yet invented, and is capable of being adjusted to any desired speed. It is very durable, and easily kept in order. It is the only working or full sized mill on exhibition.

Premium.

E. Mandeville—California made Blacksmith’s Bellows (40-inch). For workmanship this bellows cannot be surpassed by any imported. One of its advantages consists in having the iron pin or bearing go clear through the bellows, thereby avoiding the liability of its getting loose and the bellows leaking, and making it much more durable than the imported ones.

Premium.

B. A. Henricksen has on exhibition several of his Patent Ventilator Chimney Tops. These are claimed to be better than any other kind of ventilators or chimney tops now in use. One of them is in use on the smoke stack at the "Fair," and is spoken of in the highest terms by those who are using it, as they say it would be impossible to keep up steam in the boiler without this top on the chimney. It is also used on steamboats and mills in this city, and is in every case highly recommended.

M. D. Lasswell has a cast iron, single acting, double discharge windmill pump, which is very durable, and easily kept in order.

A. J. Smith has one of Hudson's Brass and Copper Pumps. It is similar to the Lasswell pump, and is a very good one for domestic use.

Johnston & Reay have on exhibition several pumps well adapted for domestic use.

Chas. Elliott has a working model Water Engine. This was attached to the water pipes, and run a small amalgamator.

Mrs. Dyer has one of Smith's model Water Wheels, New York make.

A. Lind has a model of a high-pressure Water Wheel.

E. F. Hough (of Martinez) has a model of a self-regulating Windmill.

S. F. Blasdell has on exhibition one of Roper's Caloric Engines. This engine is running a printing press and rotary pump, and at times a quartz mill and a circular saw. We find for simplicity of construction, economy of fuel, regularity of motion and durability, it is well adapted to run all kinds of light machinery, or for pumping.

Mr. Blasdell also has several of Stannard's Rotary Pumps, both hand and steam, which are worthy of notice.

A. H. Titcomb has on exhibition a steam Fire Engine and Hose Carriage, of Button & Blake's make. The first of these is singular in its construction. It is so arranged that while at work at its greatest speed it remains perfectly still—not jumping all over the ground, as some others do. This is produced by being power balanced by the piston in cylinder and piston plunger in the pump traveling toward each other at the same time and from each other in the same way, making the pressure equal at both ends, and steadyng the machine.

Classes V and VI.

Iron Smith Work, Stoves and Hardware.

SUB-DIVISION—Safes and Safe Locks.

COMMITTEE:

THOS. A. AUBERLIN, FRED. MARKT, WM. HARTMANN.

Report:

Three of our home manufacturers of Safes compete for awards in this department.

JONATHAN KITREDGE—Steel Plated "Monitor" Burglar Proof Safes, which are built and finished in the most massive and thorough manner, and may safely defy either the bar, hammer, chisel or drill of the burglar. Premium.

J. WEICHART exhibits a Fire-Proof Safe of superior workmanship and quality, entitling it to a Premium.

SAMUEL JONES exhibits a Fire-Proof Safe, of quality and workmanship deserving honorable mention.

JOSEPH BIEN exhibits a Combination Lock, showing both skillful workmanship and ingenuity, which entitle him to a Premium.

RUSSELL, ERWIN Co. have for exhibition (and not for competition) several of the well known Lillie's Fire and Burglar Proof Safes.

W. F. ENSIGN likewise has one of Lillie's "Monitor" Bank Safes.

E. C. HALL & Co. exhibit a case of Re-cut Files, representing a branch of industry which saves thousands annually on the importation of files. Premium.

C. R. RICE exhibits some fine samples of Horse Shoes. Entitled to honorable mention.

McFARLANE & FLINN exhibit two Horse Hoofs, showing the struture of foot and manner of shoeing. The care shown in the preparation of the hoofs and skill shown in the shoeing, deserve honorable mention.

J. W. QUICK has two Perforated Iron Screens, which deserve honorable mention.

SUB-DIVISION—Moulding Cutters and Plane Irons.

COMMITTEE:

SAMUEL WILLIAMS, GEORGE ROBINSON, JAS. HATCH.

Report:

N. W. SPAULDING and J. WEICHART are the only exhibitors of home-manufactured Moulding and Plane Irons, and the articles presented by each, in form and finish, are certainly not excelled, if equalled, by any imported, while in temper and wearing qualities the testimony is entirely in their favor. As between these competitors Mr. Spaulding has the largest variety of moulding cutters and some fine samples of steel-faced machine plane irons, which do him a great deal of credit; but for the finest finished and best moulding cutters the committee award to Mr. Weichert the Premium.

SUB-DIVISION—Stoves, Tin and Hardware.

COMMITTEE:

J. DE LA MONTANYA, GEORGE A. SNOOK, E. H. BRYAN.

Report:

The Committee of Examination in this department recommend the following awards:—

JOHNSTON & REAY, for best drawing Chimney Top, Premium.

OSGOOD & STETSON, for Plain Tin Ware, Premium.

J. O. WRIGHT, for Window Hinge, in frame, Premium.

A. G. DEXTER, for two Lever Door Gongs, Premium.

GALLAGHER & WEED, for Brass Sheathing Nails, Premium.

G. M. WOOD, for Name Stencil Plates, Premium.

TAY, BROOKS & BACKUS, for "Monitor" Stove, Japaned Tin Ware, Copper Ware and Pressed Ware, Premium.

The highly-finished and beautifully ornamented Japaned Ware of TAY, BROOKS & BACKUS, comprising Water and Wine Coolers, Tea Caddies, Sponge and Hip Baths, Pails, Coal Huds, Powder Flasks, etc., together with Planished Copper, Pressed Tinware and Wrought Iron Stoves, etc., formed a feature in the Exhibition worthy of special mention as affording evidence of successful enterprise in a branch of industry requiring not only capital, well-directed mechanical labor and skill, but also expensive artistic manipulation; and nothing is hazarded in saying that these goods may safely challenge comparison with any from the Eastern States or Europe, either as to substantial quality, style of ornamental finish or price.

Class VII.

Gold Pens, Jewelry, Hair Braiding for Jewelry, Seal Engraving.

SUB-DIVISION—Gold Pens.

COMMITTEE:

W. L. D. BURDE,

E. P. HEALD.

Report:

The committee in this department report—"That after a long, careful and thorough trial, both as to mechanical construction and adaptation to the wants of the writing public, they find, first, more compass of the nib; second, more flexibility; third, more support for the iridium point; fourth, a finer ink-slit in the point (the absolutely requisite qualities for good writing) in the gold pens of Mr. W. B. J. Kenney than in any others on exhibition." He is therefore entitled to the Premium.

FOURTH INDUSTRIAL EXHIBITION

SUB-DIVISION—Jewelry and Hair Braiding for Jewelry.

COMMITTEE:
E. F. OHM, T. GROB, LUCIUS THOMPSON.

Report:

The jewelry department in the Exhibition is very limited.

JOSEPH BROS. have a case containing Ladies' Waist Buckles and a fine statuette, "Agriculture," in silver.

A. MENDOZA has a well made Ladies' Waist Buckle, provided with a novel and ingenious spring fastening.

MR. BOHM is adjudged by the committee entitled to the premium on the Waist Buckles exhibited in the case of Joseph Brothers.

A. SORNIN is entitled to credit for a fine exhibition of French Clocks and Bronze Statuettes.

There are four exhibitors of hair work for jewelry.

C. F. FISHER has some good specimens of hand-braided Watch Chains.

MRS. USZYNSKI has a small case of very well and tastefully wrought samples.

MISS BALDWIN, of Marysville, has a case containing a great variety of this description of work, showing a very high degree of excellence both in design and execution.

But the committee, after a very careful examination, award to Mr. and Mrs. Schmidt, for the best work of this class, the Premium.

SUB-DIVISION—Seal Engraving.

S. GENOT is the only exhibitor of Seal and Letter Stamp Engraving, and the excellence of the specimens shown entitle him to a Premium.

Class IX.

Cutlery, Surgical Instruments, Dentistry, Dental Apparatus.

SUB-DIVISION—Cutlery.

COMMITTEE:
WARD EATON, J. W. MCKENZIE, A. F. SAWYER.

Report.

The Committee appointed to examine the California Manufactured Cutlery, at the Industrial Exhibition of the Mechanics' Institute, held at San Francisco, September, 1864, have carefully inspected the different specimens, and beg leave to make the following report, viz:

A Superior Case of Cutlery, by M. Price, of this city, consisting of a great variety of Razors, Carving Knives and Forks, Bowie Knives, Hunting Knives, etc., all of his own manufacture, are to be seen in every shape, showing the progress of manufacture from the rough bar of steel to the highly finished blade, fully equal to any ever imported. We cheerfully pronounce the above case entitled to the first Premium.

A beautiful Case of Cutlery of great variety, made by Messrs. Will & Fink, of this city, all of very excellent workmanship, among the articles in this case are pricking knives, pruning knives, barbers' shears, cork-screws, conductors' forceps, faro box and machine for cutting cards, some of which are fully equal to any on exhibition; and we earnestly recommend for them a special premium.

Your Committee would particularly request, also, that Mr. Kesmodel of this city receive a special premium for that branch of cutlery, surgical instruments of his own manufacture, and highly creditable, as also a pruning knife of his own make and of peculiar style, claimed as his own invention.

All of which is respectfully submitted.

SUB-DIVISION—Dentistry and Dental Materials.

COMMITTEE:
R. COLE, CHAS. E. BLAKE, H. AUSTIN.

Report.

Dr. H. J. Paine, San Francisco, exhibits several artificial dentures on vulcanized rubber, and gold, the former good, the latter superior, and deserving a Premium.

Dr. Q. L. Adams, San Francisco, artificial teeth on gold and vulcanized rubber—the latter the most perfectly constructed of any on exhibition with that material and deserving a Premium.

Dr. BECRS & CO., San Francisco, Artificial Dentures on gold, vulcanite, and porcelain. That on gold exhibited at former fairs; the rubber work good. The porcelain plate and gum present a good appearance, but the teeth are defective in that shading necessary to a clear imitation of nature. These dentures have some qualities to recommend them in preference to any others, but the impossibility of a perfect adaptation to the mouth, and their liability to break, must ever prove a great objection to their general use.

Dr. E. F. Bunnell, San Francisco, upper set of artificial teeth on rubber, very fair; also, upper set on gold plate and teeth attached with vulcanized rubber. The superiority of this kind of work over entire rubber plates is very much questioned.

Dr. John Heald, San Francisco, several pieces artificial teeth set on gold and rubber; also artificial teeth imported.

Dr. William Calvert, San Francisco, exhibits a good variety of artificial teeth superior to any before manufactured in the State, and are deserving the special attention of the profession. Also, corundum wheels which appear to be superior. In view of their excellent quality, and the fact that the exhibitor has entered into competition with eastern manufacturers of great repute in the production of these articles, so extensively imported, he is awarded a special Premium.

SUB-DIVISION—Dental Apparatus.

COMMITTEE:
J. D. STRONG, C. SCHENK.

Report.

The Committee on apparatus for extracting teeth, beg leave to report, that,

We found but a single article on exhibition, and that was the invention of Mr. Oudry of Pennsylvania, exhibited here by Dr. E. Belle, of San Francisco. It consists of a box, containing a freezing mixture; another surrounding it filled with a fluid called chloride of calcium, and used in this case because it takes a low degree of temperature without congealing; four gutta percha tubes, through which this fluid is pumped to and from two little pads, while they are in contact with the tooth, and a thermometer by which to regulate the degree of cold. The object attained by this apparatus is the chilling and numbing of the nerves of the tooth to be extracted, by applying to it a degree of cold nearly as low as the freezing point, thereby rendering that part of the mouth insensible to pain. The effect produced is precisely similar to the numbing of the fingers which follows their exposure to a low degree of temperature in a cold climate; and is equally harmless and no more unpleasant.

We have given minute attention to the principles on which this apparatus is constructed, and have also examined carefully its practical workings, and we believe it to be a very important invention, simple, practicable, safe, and destined to supersede all other methods of extracting teeth and performing surgical operations without pain.

Class X.

Musical Instruments.

SUB-DIVISION—Pianos.

COMMITTEE:
GEORGE T. EVANS, J. CARNAUD.

Report.

JACOB ZECH and FREDERICK ZECH each exhibit two Pianos, of fine quality and finish.

The instruments of FREDERICK ZECH we find on trial to be admirable in some qualities but unequal in others.

JACOB ZECH'S Pianos are found preferable in fullness of tone and durable qualities. He is, consequently, entitled to the Premium.

OF THE MECHANICS' INSTITUTE.

SUB-DIVISION—Flutinas and Accordeons.

COMMITTEE:

GEO. H. COES, FRANK MEDINA, MARTIN SIMONSEN.

Report:

The Flutinas and Accordeons manufactured and exhibited by C. C. KEENE are superior to any we have ever seen, and he is justly entitled to the first premium for the State of California.

SUB-DIVISION—Banjos.

COMMITTEE:

D. A. TRINN, FRANK MEDINA, G. H. COES.

Report:

The Banjo exhibited by E. S. TURKINGTON was a creditable piece of elegant workmanship; but we find, on careful examination, that the Banjos made and exhibited by CHARLES MORRELL are the finest toned and the best instruments for practical use. In our opinion Mr. Morrell is entitled to the Premium.

SUB-DIVISION—Flutes and Clarionets.

COMMITTEE:

GEORGE KOPPITZ, J. CANAUD, FRANK MEDINA.

Report:

Having examined the Flutes and Clarionets manufactured in this city by Mr. GEORGE PAFFS, we do not hesitate to say we have never seen like instruments of equally good workmanship, and in all the qualities required they are perfect. Premium.

SUB-DIVISION—Guitars.

M. Y. FERRER reports that he has examined the Guitar made by D. MOJICA, and finds it admirable in fineness and durability of tone and a tastefully made instrument, meriting a Premium.

Class XI.

Furniture, Billiard Tables, Upholstery.

SUB-DIVISION—Cabinet Work.

COMMITTEE:

W. P. TAYLOR, C. RICHTER, JAMES ROSS.

Report:

The exhibition of Cabinet Work in Furniture and Billiard Balls was extensive and very creditable.

A. HUMBURG, EASTON BROS., A. CONRAD, VICTOR CAPPE, C. H. FUHR, C. ANDREWS, GOODWIN & CO., H. EULER and B. P. MOORE exhibit Furniture of handsome pattern and good workmanship.

M. E. HUGHES, P. LIESENFELT, J. DROULHAT, JACOB STRAHLE and — ECKHART exhibit Billiard Tables of choice material and elegant finish.

The duty of determining to which the preference should be given where each could claim excellence in some particulars, and all had merit, was difficult and embarrassing; but after most careful inspection we award the Premium for skilful workmanship in Cabinet Furniture to EASTON BROS.

And for the best Cabinet Work on Billiard Tables, JACOB STRAHLE is entitled to the Premium.

SUB-DIVISION—Upholstery.

COMMITTEE:

JOS. ACKERMAN, E. BLEGMANN, PHILIPPE NEPPERT.

Report:

Restricted to the award of one premium only, the committee on Upholstery Work find, after a careful examination, the best work in this line on a Sprung Back Iron Chair, exhibited by GOODWIN & CO., and that firm is therefore entitled to the Premium.

SUB-DIVISION—Playing Qualities of Billiard Tables.

ALFRED MOULIN, Chairman Committee.

Report:

The committee of five chosen by the competitors report, through the Chairman, Alfred Moulin, that they

met by appointment in full committee, tried one of the Tables of M. E. HUGHES, one of P. LIESENFELT'S, one of J. DROULHAT'S, one of J. STRAHLE'S and the Table of — ECKHART, but were so divided in opinion upon the respective merits of the Tables tried, that they were unable to determine by a majority of the committee to which the award should be made.

SUB-DIVISION—Billiard Balls.

COMMITTEE:

M. F. BUTLER,

JOS. LITTLE.

Report:

J. G. H. MEYER is the only exhibitor of Billiard Balls. We have carefully examined the Balls turned by Mr. Meyer, and for perfect truthfulness and beauty of execution in coloring and otherwise, we have never seen them surpassed by the imported article, and we take pleasure in awarding to him the Premium.

Class XII.

Carriages and Wagons.

COMMITTEE:

R. S. EELLS, E. G. WOODSIDE, H. M. SHULTE.

Report:

The committee appointed by the exhibitors of Carriages at the Industrial Fair report:—

That we have made a careful examination of all the vehicles of California manufacture offered at the Fair, and find scarcely any competition, each exhibitor showing his particular class or style of work, which is peculiarly his own. The show of fine workmanship, however, is very creditable to our California carriage makers, and they can safely challenge any of the celebrated Eastern manufacturers to excel this show of fine work, either for style, durability, or neat workmanship. We can recommend that the following persons or manufacturers be awarded such premiums as your honorable body may see fit to present:—

To POLLARD & MOORE, for an Extension-Top Barouche, showing extraordinary workmanship in iron work, also in trimming, and the whole vehicle an elegant and creditable piece of workmanship.

To A. SEARLS & Co., for a Brett Carriage (Central Park style), light and elegant in its proportions, and showing California manufacturers are not to be outdone in manufacturing stylish and comfortable vehicles.

To G. P. KIMBALL & Co., for a Family Carriage, of more than usual merit for genteel style and workmanship, not excelled by any manufacturer on the Pacific coast and by few of the oldest and best manufacturers in the Atlantic States.

To W. R. BROWN, for three Sun or Cloth Top Buggies, New York styles, which for light buggies cannot be surpassed for elegance of proportion, style and workmanship, in the United States.

To A. SEARLS & Co., for one Sun-Top and three Leather Top Buggies, styles peculiarly their own, very "natty," and particularly worthy of notice, exhibiting originality as a manufacturer and exquisite workmanship.

To G. P. KIMBALL & Co., for a "Park Phaeton" and open no-top Buggy, both vehicles showing workmanship of a high order, alike creditable to themselves and this Exhibition.

To M. P. HOLMES, for a neat Side-spring Concord Style Top Buggy, in all its proportions and workmanship—a good serviceable vehicle.

To SPRUNG & MCARRON, for an open or no-top Concord Style Buggy, unfurnished, not trimmed nor painted. This vehicle presents extra workmanship, both in wood and iron, and is deserving of examination by our mechanics.

To E. C. BROOKS, who exhibits a new style Buggy, with combination springs of rubber and steel, with compound levers. Quite a novel and ingenious invention.

To M. CURTIS, for an Express Wagon, of good proportions, skillful workmanship and fine finish.

To MC LAUGHLIN & FEESSEL, for a good Lumber or Farm Wagon.

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To A. M. EELS, for a Child's Chaise, of skillful workmanship and proportions.

To G. P. KIMBALL & Co., for model of Patent Coupling Truck; a very useful invention.

To W. R. BROWN, for a Butcher Cart, made and finished in a thorough and workmanlike manner.

To BATH & MORRISON, for an unfurnished (not painted nor trimmed) Butcher Cart—a very carefully made and workmanlike job.

To E. G. WOODSIDE, for new style of Thoroughbrace Coach or Carriage Spring, adding to the old style thoroughbrace India rubber springs at each end, by which greater spring will be attained, consequently more ease to passengers and less strain on the vehicle.

In making an examination we find that the best show of workmanship is exhibited in the Extension-Top Barouche made by POLLARD & MOORE, and that they are entitled to the first premium.

Class XIII.**Carving and Gilding.**

COMMITTEE:

S. C. BUGBEE, SAM'L M. BROOKS, EDW. C. POWERS.

Report:

Having been appointed a committee to examine the specimens of Carving and Gilding on exhibition at the Fair, we would respectfully report:—

Carving.—The works exhibited by Mr. W. B. GLEASON (a Quail, Dove and Hawk's Feather in wood), we consider the most exquisite specimens of that art we have ever seen in any country, and he is entitled to the highest award.

The Carved Flowers, by Messrs. BRYANT & STRAHAN, are very finely done and in bold relief.

Gilding.—We consider Messrs. WOOLL & SUTHERLAND entitled to the highest award for a very fine ornamental Gilt Frame of Table.

The specimens of Gilding by Messrs. NILE & KOLLMAYER, also by Miss LEKENS, are fine, and deserve notice.

Class XIV.**Lumber, Scrolling, Turning, Etc.**

COMMITTEE:

WM. PATTON, C. W. DAVIS, C. L. TAYLOR,
W. H. EASTMAN, J. WARREN.

Report:

NATHANIEL PAGE & Co., of the Union Lumber Yard, exhibit specimens of Sugar Pine from the mills of the Union Lumber Co., of Marysville. Said lumber varies from one inch to three inches in thickness, is four feet wide and from twelve to sixteen feet long. This description of lumber is extensively used in building, for finish and for the manufacture of doors, sashes, etc., and bids fair to exclude the importation of Eastern pine from this market altogether. The only general purposes which this does not entirely supersede, and for which Eastern pine is now used on this coast, is for patterns for foundry work, but which, even in this department, is being superseded by proper selections and seasoning of sugar pine for the purposes required. The specimens of sugar pine on exhibition are of the very finest quality, their extraordinary size, closeness of grain and capability of smoothness of finish and durability, freedom from pitch, excellency of manufacture and superior whiteness, class them as equal to any white pine imported and superior to the bulk which comes to this market from the East. The display of matched sugar pine shows a superiority of workmanship and excellency of material. There is about ten million feet of clear sugar pine used in this State annually for the purposes above named, and about one million Eastern pine imported per annum. Five years ago these figures were reversed.

The Mendocino Red Wood exhibited by Messrs. Page & Co., is of the best quality of that material. It is much used in buildings for outside finish and makes a good common finish for joiners' work. It is very durable when properly selected. This lumber is used by carpenters for reasons last mentioned where no great

strength is required. The locality whence these specimens are derived is considered to be the best yet discovered in this State. Forty millions superficial feet, lumber measure, are used in the city of San Francisco per annum for building and other purposes. We think the exhibitors are entitled to the highest premium for Lumber.

M. C. DUPUY exhibits a model of a Street House, showing a bressummer or lintel to support the wall over a retail store front. This bressummer is framed of wrought iron, of a form similar to the top and bottom chords and arc of a similar truss bridge, so often used. The principle being correct, there is no reason why this bressummer should not supersede cast iron in many cases for similar purposes. By mathematical calculations its strength would be estimated; but the only sound results should be had by experiments, so as to test its absolute capacity of resistance to transverse pressure. We consider the bressummer of Mr. Dupuy meritorious.

M. E. FITZGIBBON exhibits parts of Wharf Piles covered with a silicious solution, applicable as an external coating to prevent the attacks of the "toredo navalis," so destructive in its effects upon all timber constructions within the reach of the ocean within the warm, temperate and torrid zones. The specimens exhibited had been, according to representation, submerged six months, and showed no points of attack of the worm. Another specimen of the same timber, unprepared as above, showed damage by the "toredo." Solutions of silica have been long used in England, in humid situations, where the effects of sulphurous smoke and other destructive atmospheric influences have caused damage to stone work, as an external application to prevent decay; but this is the first instance of which we have heard of the same having been applied to the protection of piling as above. The effect accomplished may be the hardening of the external surface next to the water, thus preventing the penetration of the worm; and if it will do so six months it may do so six years, with every probability of it being as durable at the end of that time as it was before, provided no external abrasion occurs to destroy the artificial hardened surface. We think the matter worthy of being tested in a more thorough manner as likely to be valuable in its results, if favorable, in the growing city of San Francisco on her temporary wharf improvements.

MR. FITZGIBBON also exhibits specimens of Asphaltum Sidewalk, of good quality. Asphaltum sidewalks are popular when properly constructed. It does not appear, however, that they can be considered practically effective as thoroughly useful unless they can be made so that the material will not be made to run or become half liquid under ordinary degrees of summer heat of a temperate climate free from refracted heat, where the thermometer may stand 90° or 100° Fahrenheit. Asphaltum is formed of petroleum flowing through rocks, having a dessicating effect upon that material which produces it, and when petroleum is found convenient for commercial purposes, not filtrated as above named, it must be assisted by artificial means, such as boiling, so as to expel, carbonize and oxidize its inherent oil, etc., and the addition of absorbents not assailable or alterable by heat to form asphaltum sidewalks. The process of manufacture nearest attaining these results, whatever the natural state of the mineral, is the most successful. We think Mr. Fitzgibbon has succeeded in producing, by artificial means, in a very great degree of perfection, the results above named in the example before us, and is certainly entitled to an award of merit for his preparation to preserve timber work above named, and also the first Premium for asphalted sidewalk, notwithstanding there were no other competitors.

JOHN NESTER exhibits Brown's Patent Metallic Weather Strips, for doors and windows. We think they will do very well for the purpose intended. Being the subject of a patent, any award of merit on our part would be supererogatory.

FRED. OTTO exhibits several specimens of Wood Patterns for casting or engraving, very good in workmanship and art and deserving of honorable mention.

W. ALLEN—Scroll Sawing, of superior workmanship. Worthy of a Premium.

B. H. FREEMAN—Rosewood Vase, of superior workmanship. Worthy of a Premium.

PINKERTON & SHERMAN—Specimen of Machine Cut Picket Fence. There is, in reality, more merit in this production than at first sight would be considered. Its comparative economy of cost with that of turning does not appear; but the producing of forms of polygonal cross section instead of circular, as when turned, opens out a new means of decorative joinery, likely to be cheaply applicable when, as in this case, produced by machinery. We think Messrs. Pinkerton & Sherman are entitled to a diploma of first premium for the above, provided the machinery is of their own invention.

H. S. HUNTINGTON has a sample of very superior Sawed Shingles, which merit honorable mention.

Class XV.

Coopering, Wooden Ware.

COMMITTEE:

A. MURDOCH, Wm. GUNN, G. ENGLEHARD.

Report:

The committee appointed to examine the samples of Cooper Work exhibited in competition, find that the large Wine Cask made by J. C. RUPPENTHAL entitles him to an award for the best work.

Premium.

ARMES, DALLAM & SKINNER exhibit a large variety of Wooden Ware, Tubs and Pails from their manufactory in this city. The manufacture of this indispensable class of wares has become one of our important established industries, and the samples here shown are, in all respects equal to any imported, and should be awarded a Special Premium.

L. VAN LAAK exhibits Brooms of superior quality, entitling them to highly honorable mention.

Class XVI.

Wool and Its Manufactures.

SUB-DIVISION—Wool Packages.

COMMITTEE:

A. B. FORBES.

Report:

The undersigned, your committee, have examined specimens of Wool packed for shipment, on exhibition at the Industrial Fair, and beg leave to report:—

Two lots of Packed Wool were exhibited, one lot shown by Messrs. MCLENNAN & GRISAR, the other by Messrs. CLARK & PERKINS. The bales shown by the first-named firm were loosely packed; iron hoops light, wooden battens narrow, while those by the last-named firm are packed in a very substantial, compact and tightly shape, the iron hoops stout and of good width, the wooden battens broad and well placed, affording great protection to the package in handling.

Wool, forming as it does one of the principal articles of export of our State, it is of great importance that it should be packed for transportation to a distant market in the most compact and substantial manner possible, the advantages gained being a saving in bulk, less susceptibility to damage and a decreased rate of freight. The importance of these points will be readily appreciated by those interested. As the bales exhibited by Messrs. Clark & Perkins possess those advantages, and are altogether in the most desirable shape and condition, doing great credit to the exhibitors, your committee therefore give them the Premium and award.

Respectfully submitted.

COMMITTEE:

C. J. DEMPSTER, JOHN McALLISTER.

Report:

The undersigned, notified of appointment upon a committee for the examination of Wool and Wool Packages, visited the Exhibition several times, in expectation of meeting other members of the committee, but failing to do so, we do not feel authorized to offer more than an individual report. We found a fine assortment of domes-

tic and foreign Wool, Fleeces and Samples, exhibited by Messrs. CLARK & PERKINS, and the same firm exhibit also samples of classified Wools, baled for shipment. The bales were compact, heavily hooped and battened, leaving nothing in this respect for the carrier to desire; indeed it may be questioned if any party but the carrier finds advantage in this extra heavy style of protecting the bale, as the extra weight adds to the cost of freight, while lighter bands and battens might sufficiently serve the purpose.

Messrs. MCLENNAN & GRISAR exhibited sample bales of Scoured and Graded Wool, well cleaned and assorted. (We cannot, with any confidence, express our opinion as to the success of this recent undertaking of this firm. It can only be determined by experiment and experience whether the scoured wool will carry on sea voyages with as little liability to injury as the wool protected by the natural oil, which is removed with the dirt in scouring.) The bales, though not so tightly packed as when the wool yet retains the grease and dirt, were well pressed and sufficiently secured for all the ordinary hazards of transportation. This firm was the earliest to engage here in the business of classifying and packing wool for shipment, and however the experiment of scouring and grading may result, the enterprise and energy shown deserve approbation.

SUB-DIVISION—Woolen Goods, Etc.

COMMITTEE:

A. AUSTIN, SIEGMUND HERMAN,
C. H. HARRISON, M. M. NOAH.

Report:

We the undersigned, appointed a committee to award premiums on Woolen Goods, would most respectfully submit a brief report of what has come to our knowledge in reference to woolen manufactures, in our opinion the most important branch of industry which has ever been undertaken in our State.

California owes much to the enterprise and energy of the gentlemen who have brought this important industrial feature to such perfection that it is impossible to import goods of the same grade and sell them in competition, our home-made goods being superior in fineness of material and in general finish. During the past year both mills have extended their capacities for the manufacture of cloths for general use and produce cloth for military and civic wear, which is very good in quality, finish and harmony of coloring, and much better adapted for the climate of the Pacific coast than the imported article.

It also affords us much pleasure to call attention to another branch of equal importance—viz: mauufacturing carpets, lately inaugurated by the Mission Mills, which exhibits an article of what is known as "the Ingrain," and equal to imported in design and coloring. The State of California and the surrounding Territories being only equalled by Australia for wool growing, this fact, with the well known energy and the ample means of the present proprietors of the woolen mills, is a guarantee that this branch of industry is yet destined to be a very important feature in the commercial progress of our State.

We also take an opportunity of stating that the woolen manufacturing interests are deserving of every protection and encouragement, and are well worthy of the fostering care of our Legislature in offering inducements in the way of premiums for the best manufactured articles of their various fabrics. By so doing they would create a worthy rivalry, besides encouraging improvements in manufactures, benefitting the community at large.

It is also worthy of remark that every article made by either of the mills is all wool, imported goods of similar grade very often, if not always, being mixed with cotton in more or less quantity.

With these few remarks we will, before informing you of the awards, state on what grounds our conclusions were arrived at. We were told that a representative of each mill had classed together the same grade of goods of their respective factories, but we were not advised of the prices asked by either mill for the goods shown us,

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We are, therefore, in ignorance whether the articles awarded the first premiums are sold for the same price, or higher or lower. By this we desire that you should understand that our decisions are only applicable to the quality of the fabric presented us, and can in no way be considered a decision in favor of one mill more than another as a factory. We are inclined to the belief that with the same materials the one factory can do as well as the other, and we further believe that no test can be made unless the same material is known to be used by each mill, and such being known, the mill that can make the best and sell the cheapest is the one entitled to the first premium. Now as no such course has been followed, we can only award the first premium for the qualifications mentioned—viz: that of which of the two mills has the best articles on exhibition, and which we do as follows:—

Blankets—Washoe, Mission Mills; Sluice, do.; India, Pioneer Mills; Family: three grades were exhibited by each mill, the award for each was given to the Mission Mills.

In Flannels, three classes were exhibited—viz: White, gray and red, and awarded as follows:—White, Mission Mills; Red, do.; Gray, Pioneer Mills.

In the exhibit of Cloths, which was very creditable and beyond our expectations, and would do honor to any European market, the award was given to the Mission Mills. Military Cloth, dark and light blue, awarded to the Mission Mills.

The Mission Mills are also entitled to the award for the most extensive and varied assortment of goods.

In the opinion of your committee, the Mission Mills are also entitled to a special and marked premium for the carpet exhibited by them, although no competition was made.

Your committee would also award a special premium to the Pioneer Mills for their manufacture of undershirts and drawers, although no competition was made.

Although the Mission Mills received the largest number of awards, your committee would be derelict did they not unite in making commendable and favorable mention of the different articles from the Pioneer Mills, and would recommend that the Mechanics' Institute, in its future Fairs, should stipulate that woolen goods offered for competition shall be taken from the stocks on sale of each factory.

All of which is most respectfully submitted.

Class XVII.

Minerals and Mineral Products.

JOSEPH BRITTON, Esq., President of the Mechanics' Institute.

SIR:—As a member of the Committee of Award upon "Minerals and Mineral Products," Class XVII., of the late Industrial Exhibition, I send you the following notes upon the contributions in that department. As I did not meet or see any of the other members of the Committee, I am only able to present this report individually, and not in the name of the Committee. Respectfully yours,

W. P. BLAKE.

Although no special effort had been made to secure a representation of the mineral resources of California and the adjoining States, the contributions in the department were more numerous and varied than visitors generally supposed, and although a fractional and disjointed representation of California resources, was nevertheless of considerable importance and interest. Twenty-four entries are found in the catalogue; but there were other contributions not enumerated. The following are brief notices of the most important contributions, including those of manufactured products:—

Coal.

99.—B. H. Ramsdell, San Francisco, Three specimens of coal from the Black Diamond mines, Mt. Diablo, Cal.

These specimens were remarkable for their size and purity. One mass from seam No. 1 was five feet long and two feet by three square, and weighed 1,730 pounds. The mass from seam No. 2 was about six feet long and three feet by three feet square. It represented the whole thickness of the seam. Seam No. 1 is five feet ten inches

thick, and No. 2 is twenty-eight to thirty-six inches thick.

The production of the Black Diamond Coal Company's mines, for the past three years, has amounted to 37,000 tons. The average production is 70 tons a day. There are five different mines now working, and with about the following production per day for each:

Black Diamond Mine.....	70 tons
Union.....	40 "
Eureka.....	20 "
Manhattan.....	20 "
Pittsburgh.....	30 "

Or 180 tons for all the mines per day, or 5,400 tons per month. It is carted to the San Joaquin river, to the place known as the New York of the Pacific, where it is shipped to San Francisco and other places. The expense of transportation to this city from the mines is \$3.50 per ton. It sells at from \$7 to \$9 per ton by the cargo, according to quality. It is used chiefly by the river and coast steamers. The sugar refineries consume about 150 tons of the Black Diamond coal per week. It is sold at retail to families for \$12 per ton. With a railroad from the mines to the landing—which, it is estimated, may be built for \$80,000—this coal can be sold in San Francisco for \$7 per ton.

Iron.

103.—Governor A. C. Gibbs, Oregon, One specimen of iron ore, 16 miles from Portland.

This specimen, as I learn from a label attached, is from an "extensive bed." It is the variety of iron ore known as "limonite," and is apparently of excellent quality, suitable for making pig and bar iron. It is porous, and is without any visible mechanical impurities. It should contain about 50 per cent. of metallic iron, and may become of great value as a source of iron for this coast, especially if upon water navigation and near coal and limestone.

Copper and Its Ores.

384.—John Simms, Copper ore from the Fall Creek lode, Josephine county, Oregon.

A fine mass of nearly pure yellow sulphuret of copper, fifteen inches long and eight inches thick, containing about 25 per cent. of copper.

643.—W. G. Moody, San Francisco, Copper ores from Nacozari District, Sonora, Mexico.

These contributions consist of large masses of variegated sulphuret of copper, known among the Cornishmen as "horse-flesh ore." The working results of the ore are stated as 48 per cent. of metallic copper and \$63 of silver per ton.

180.—M. G. Elmore, Table Mountain Copper Mining Co., Copper ore.

This is a very fine mass of yellow ore, weighing 600 pounds, taken out 150 feet from the surface. Assay value, 23 per cent. The mass is about three feet long and two feet wide, and is nearly pure. The company is "shipping from 60 to 100 tons a month," and developing the mine.

Union Copper Mine, Del Norte county, Cal.; Kruse & Fuller, San Francisco.

A large mass of copper ore from this mine, weighing 1,060 pounds, and containing, according to ticket, 33½ per cent. of copper, 2 ounces of silver and ¼ of an ounce of gold, and with a total value of \$116.44. This was presented to the California Branch of the U. S. Sanitary Commission.

Francois Genard, San Francisco.

A series of crucible buttons, exhibiting the various stages of production of copper from the ore by fusion in crucibles. The series contains black copper, the slags, the results of second fusion, and the refined copper.

J. T. McDougall, San Francisco, One bag copper ore; five bars of copper.

These bars of copper are claimed to have been produced at one operation by the exhibitor, under a patent dated March 29, 1864. There was no opportunity to examine the operation.

470.—Eliza J. Hall, "Copper ingot smelted in the patent volcanic smelting furnace."

C. E. Johnson, Specimen of metallic copper obtained from carbonates and oxyds in one hour, from the ore, by a new process.

350.—Henry R. Reed, Treasurer Cordillera Co., San Francisco, Silver and copper ore and ingots from the Santa Barbara Mines, Chihuahua, Mexico.

The ore in this collection is, apparently, vitreous copper. The two ingots are said to be the product of 300 pounds of unassorted ore.

Silver.

737.—Maria Silver Mining Company, San Antonio, Lower California.

A fine mass of silver ore, 18 inches long and about 12 broad, nearly pure, but with a few patches of zinc-blende interspersed.

814.—Samuel Pillsbury, Silver ore from La Libertad mine, Cacachillas District, Lower California.

This is a fine mass of ore, "Colorados," from near the surface, showing the various colors due to the decomposition of the silver and copper minerals of the vein. It has a vein-stone of quartz.

L. Leland, Specimens selected from the Occidental Hotel cabinet.

A glass case, containing about 100 specimens from various mines in California, Washoe and Arizona. It is by far the choicest general collection of the Exhibition, and contains specimens from the Gould & Curry and other ledges on the Comstock, from the Moss Ledge, from the Union copper mine, and others not otherwise represented in the Exhibition. Mr. Leland, in providing a suitable place for the reception and display of mineral specimens, has done a public service and secured a magnificent cabinet.

Gold.

744.—Melones and Stanislaus Mining Company, Calaveras county, Cal., G. Congdon, San Francisco; Three specimens of gold and silver ore.

These are splendid specimens of quartz vein-stone, charged with massive gold, intermixed with a telluric mineral, probably tetradymite. They are taken from the Stanislaus mine, about one mile south of Carson Hill, at Robinson's Ferry. They were obtained at a depth of over 200 feet from the surface. The vein varies from six to eighteen inches in thickness, and is sometimes divided up into four or five parallel sheets in the slate. The slate near the vein is found to be impregnated with gold. The tellurium has been traced downwards from the surface, and at times has been abundant, and furnished some choice cabinet specimens of this rare combination. The mineral differs from that of the Fields vein of Georgia, where remarkable masses were found, in its color, and in not being foliated. The selected rock from the vein is sent down to San Francisco, to be smelted by Kellogg & Hewston. Advances can be had upon it to within ten per cent. of the fire assay. The vein was discovered in 1850, and has always had rich pockets. It is in the vicinity of the celebrated Morgan and South Carolina mines.

789.—H. W. Williams, Whisky Hill Mine, Tuolumne Co., Gold specimens.

A suite of remarkably fine gold specimens in quartz, with numerous flattened, distorted octahedral crystals. There are several irregular plates, with numerous crystalline projections—the solid angles of crystals. These specimens much resemble some formerly obtained from the Gold Hill vein of Grass Valley.

500.—Blue Mountain District, Calaveras county, Cal., Gold and silver ore from the Heckendorf, Celina, Star of the West, Loyal League and Gold Hunter companies.

These ores are all similar, consisting of argentiferous galena, pyrites and probably free gold, spread through quartz. If there is an abundance of such ore, it could be profitably crushed and concentrated for shipment to smelting works.

8s1.—J. F. McDougall, for Siskiyou Mining Company, Siskiyou county, Cal., Gold in quartz.

Numerous very rich specimens of gold protruding from the vein-stone.

Salt.

A. B. Winegar, Union Salt Works, 322 Front Street; Samples of ground rock salt, dairy salt, cooking and table salt, in five, ten, twenty, and fifty pound sacks.

1. Rock Salt from Lower California—white crystalline crusts one and two inches thick. 2. Coarse salt from

Carmen Island. 3. Coarse salt, Lower California. 4. Rock salt in large clear crystals, transparent, and remarkably dry and pure—from Virgin River, Arizona Territory.

The samples of table salt exhibited are of excellent quality, being white, dry and fine, and whiter than the Pembroke table-salt shipped to this port from Boston. It is made from coarse, clear crystals of San Pedro rock salt, kiln-dried and ground.

Of the rock salt, that from San Pedro appears the best. An article that compares favorably with it, and with the Carmen Island salt, is made on the shores of the Bay of San Francisco, near Union City. The crystals are of medium size, sharp and clear. Some of the salt from that vicinity in crystals of about the same size, is milk-white, and attracts moisture more rapidly. It contains more impurities, and is inferior in quality to the clear crystals. The exhibition of this firm contains a greater variety of samples than the others, and a superior article of table-salt, worthy of a premium.

Barton & Brother, Pacific Salt Works, 218 Sacramento st.

Dairy salt in fifty pound sacks.

A very fine article of dairy salt, ground, and both white and dry.

A. Georgiani, Trapani Salt Works, Mount Eden, Alameda County, California, and 421 Davis street, San Francisco, Rock salt in half formed, irregular crystals, not very white, but quite dry.

Plummer & Co., Crystal Salt Works, Alameda County, Table and dairy salt; also, rock salt and blown salt.

These varieties of salt are manufactured by solar evaporation from the water of the bay at the eastern side. The sample of rock salt is of excellent quality, being apparently quite dry, and in well formed cubical crystals, clear and clean. The "blown" salt is a superior article, approaching in character to the Liverpool salt, for which it might advantageously be substituted. The grains are remarkably clean and even, and the crystals are well formed. It is made by the action of the wind upon the concentrated brine, and as rapidly as the crystals form upon the surface they are blown to the edge and thrown up in ridges on the shore or upon platforms made to receive them. A premium for this variety is proposed.

The supply of salt for California is obtained from Liverpool, Carmen Island, San Quentin, Lower California, San Pedro, and the Bay of San Francisco. At all these places, except the first, it is prepared from sea-water by solar evaporation. It is estimated that over 15,000 tons of salt will be manufactured on the eastern side of San Francisco Bay, this year; the season has been extremely favorable, and the duties on foreign salt are now so high as to stimulate home production. Imported salt pays a duty of \$4.80 per ton. Manufacturers or producers of salt within the limits of the United States, pay a duty of \$1.20 per ton. Liverpool salt sells in this market for \$25@\$30 per ton, according to its quality. Carmen Island salt sells at \$18, and the best bay salt for \$10 per ton. The examination of the various samples, and products in bulk, shows conclusively that there is not sufficient reason for this great difference in price or value. The ground rock salt made in this State, when well made, is of excellent quality. With the superior advantages which this climate offers for the manufacture of salt by solar evaporation, salt equal to any can be produced in unlimited quantities, and there is no reason why the home article should not entirely displace that of foreign production. The samples of rock salt from San Pedro and the bay show that such a result can not long be deferred. Already, for ten miles along the eastern shore of the bay, salt works are established, at intervals, and their number is increasing. France and the countries bordering the Mediterranean, are supplied in a similar manner, by solar evaporation. Fortunately for the interior of Nevada and Arizona, there are extensive salt-beds at intervals over the surface, from which the numerous silver reducing establishments are supplied.

Miscellaneous.

California Borax Company, Samples of native and refined Borax from the borax lake in Lake County, California.

Refined borax from the above locality has been introduced into this market within the last year, and being of a superior quality and cheaper, and of home manufac-

FOURTH INDUSTRIAL EXHIBITION

ture, is preferred by the consumers. Large amounts are used by the bullion smelters and refiners. It is made by re-crystallization from the native borax found in crystals in the mud at the bottom of a lagoon. These crystals are remarkable for their size and perfection, some of them being four or five inches long, and having very perfect faces. As inaugurating a new industry and supplying our market with a superior article of home production, this enterprise deserves the highest premium in the award of the Institute.

327.—George S. Dickey, San Francisco, One case of Monsel's Salt.

A very fine and complete exhibition of all varieties of this valuable therapeutic agent, in scales, in powder, and in solution, showing great skill and nicety in making pharmaceutical preparations, of which this is one of the most difficult. It is a per-salt of iron possessing remarkable haemostatic properties, first made known by M. Monsel, of the Military Hospital, Bordeaux, in 1852. Its action on blood and albumen is peculiar, producing coagulation without any caustic or irritant effect on the tissues. It has been used with great success in stopping hemorrhage where other styptics have failed, and where ligatures would otherwise have been required.

This preparation was first made in California by Mr. Dickey, in 1858. It is singular that it was found difficult to prepare an article of equal purity and excellence in the Atlantic States. Samples sent from this city were repeatedly pronounced superior to any that could be obtained there. An eminent practitioner found it necessary to send here for a supply, for the so-called Monsel's Salt made at the East would not produce the effect ascribed to it by M. Monsel and surgeons in that city. The salt, as shown by Mr. Dickey, is in light, thin scales, of different sizes and thickness. They are translucent, of a light reddish brown color. These are produced by evaporating the solution to a thick syrup and cooling it on glass plates, from which it is afterwards detached by chisels. A premium should be awarded to this exhibitor for a superior article of Monsel's salt, showing rare pharmaceutical skill in its preparation.

Pacific Metallurgical Works, Case of specimens of ores from various localities, and a sample of fire-proof paint.

The last mentioned article is prepared from the high-colored residues from the working of ores, and contains numerous metallic oxyds. It has a chocolate red color, due to the predominance of oxyd of iron, and when mixed with iron forms a cheap paint for rough outside work. The manufacture of cheap paint is beginning to attract some attention in this city—a mill having recently been started to prepare various grades of mineral paint from the oxyd of iron and manganese found in seams or layers in the rocks of Red Island.

James Patterson, Placerville, El Dorado county, Cal.

This exhibitor sends pen and writing-stands and match-stands, manufactured by him from a steatite, soapstone, obtained near Placerville. These objects, when covered with a coat of varnish, greatly resemble serpentine or verd-antique, and are very attractive in their appearance.

Terra-cotta ornaments, San Antonio, Alameda county.

A very fine exhibition of architectural ornaments, which commend themselves to builders by their excellence in design and their superiority to plaster or wood in resisting the weather. Deserving of a premium.

H. Herzer, Kearny street, San Francisco, Muffles, crucibles and scorifiers, made in this city, from California clay.

In form and appearance these samples seem quite equal to those imported from France, and they are sold at lower prices.

Recapitulation of Recommendations for Premiums,
California Borax Company, For superior borax of California manufacture. Highest premium.

George S. Dickey, San Francisco, For a superior article of Monsel's salt, showing great pharmaceutical skill.

A. B. Winegar, Union Salt Works, For the best display of salt, and for the best article of table salt, made from California rock salt.

Plummer & Co., San Francisco, For a fine article of blown salt, made in Alameda county.

San Antonio Pottery, Alameda county, For display of terra-cotta ornaments.

H. Herzer, San Francisco, For crucibles, muffles and scorifiers, for assayers' use, made of California clay.

Special Report on Process of Reducing Copper Ores.

COMMITTEE:

H. P. WAKELEE, JOHN N. RISDON, W. T. GARRATT.

The undersigned, comprising a committee of three, appointed to examine into and report upon the merits of a new process for the reduction of copper and silver with the "Fusible Hydrous Silicate of Alumini," in-

vented and patented by JAMES T. McDougall, of the city and county of San Francisco, most respectfully report as follows.—

That your committee, being first satisfied of the patents by inspection of the letters patent and the accompanying specifications duly attested, proceeded to examine into the process and its results, by hearing from the Patentee a very lucid explanation of the mode and manner of its working and by actual inspection of samples of reduced metals of a very superior quality, weighing from one-half an ounce to forty pounds, and the examination of various samples in the different stages of reduction. That your committee are perfectly satisfied with the simplicity, economy and perfectness of the process, and in view of its importance and value as an agent and auxiliary, not only to our commerce but to the rapid developments of the mineral resources of this coast, unanimously recommend that the highest premium be awarded to James T. McDougall for the said process.

Your committee have also examined Mrs. ELIZA J. HALL'S Patent Volcanic Smelting Furnace for the smelting of ores (a detailed description of which accompanies this report), and it appears to be well adapted to effect an economical and thorough reduction of ores, and is worthy of the inspection of those interested in such processes.

DESCRIPTION.—The design of the Volcanic Smelting Furnace is so to combine ample arrangements for a powerful draft with a condensing apparatus for saving volatile portions of various metals, and a form of furnace most suitable for retaining an intense heat, that a greater economy of fuel and time may be realized, than has heretofore been the case. To this purpose, I adopt the elliptical or egg-shaped form of furnace, and the principle of the blow-pipe. The introduction of the draft is at several different and opposite points, so as to concentrate the same, at once toward the middle of the fire and thus relieve the sides of the furnace of a great proportion of the heat, and intensify the same where it is most wanted; namely, in the mass of ore to be smelted. The melted mass is thus hurled towards the center and sent down, much like an eddy in water. The flue is continued into the interior of the condenser until it reaches half the height of the same, where it is surmounted by a Conical Cap, supported by columns at a sufficient height to allow the fumes to escape into the body of the condenser. The sieve is for the purpose of discharging a continuous shower of cold water into the condenser, by which the volatile metals in the fumes are precipitated to the bottom of the same, and thus saved for reduction.

The opening in the center of the sieve allows the draft to continue from the flue to the outer air. All the fumes are subjected to condensation without any loss of heat in the furnace; indeed, the heat is rather increased by being confined and thrown back by the cold water coming in upon the flue.

The boiler placed on top of the furnace is for the purpose of furnishing steam as an oxidizing agent, both above and below the fire. The jet of steam which is introduced at the bottom becomes super-heated by passing around the inside of the top of the furnace.

The Tuyeres or draft-holes may be increased or diminished at pleasure. The draft may be supplied by one or more fan-blowers, worked by any power that is available. Not less than nine Tuyeres should be used in a furnace of the capacity of five tons at a charge.

The principal fluxes made use of in this furnace, are limestone, carbonate of soda, salt, carbonate of potash and glass.

The fuel used is exclusively charcoal, of which two bushels are required to one bushel of ore. The ore is to be thoroughly mixed with the charcoal. That fuel is best which contains the most carbon, and thus charcoal, having a great affinity for sulphur, absorbs it from the melting ore and leaves the metal free.

The boshes or supports forming contractions at the sides near the bottom of the furnace, are the points of greatest heat. It is best to set the draft-tubes at an angle of from thirty to thirty-five degrees: first, that the ends of the tubes may not be stopped by the melting mass, and, second, to direct the greatest heat towards the bottom of the furnace in order to prevent the metal from chilling on its way out.

I have received letters patent for, 1st. A COMBINATION of parts for the reduction and saving of ores. 2nd. The condenser with the sieve at its top, through which a continuous shower of cold water is kept pouring for the purpose of condensing and precipitating the volatile portions of the metals escaping with the draft. 3rd. The flue cut-off, within the Condenser, and surmounted with the Conical Cap, to secure the condensation and precipitation of the volatile portions of the metals escaping with the draft.

ELIZA J. HALL.

Class XX.**Leather and Its Manufactures.****SUB-DIVISION—Saddlery. Etc.****COMMITTEE:**

W. H. BAXTER, HENRY JUDGE, J. M. JOHNSON.

Report:

MAIN & WINCHESTER exhibit, of their own manufacture, a very great variety of superb Harness, Saddles, Bridles and Martingales, Kersey Horse Dresses, Military Horse Equipments, Whips, Stockings, Lashes, etc., which for elegance of finish and richness of style defy competition with the world. Especial attention is called by your committee to the interest manifested by these gentlemen in contributing to the Exhibition, their productions showing conclusively that we are not behind (but under the circumstances ahead of) our older sister States in this line. Their harness consists of Double Buggy and Carriage, heavy and light; Single Buggy, do. do. Saddles--Ladies' Quilted Hog and Buckskin best English Style Riding Saddles; Ladies' California Style Riding Saddles; Gents' Best English Shafted Riding Saddle; Gents' Best English Jockey Riding Saddle; Gents' Best Texas Ranger and California Saddle. Bridles and Martingales.--Single and Double Rim, Broodooon, Snaffle, Pelham, Post and Raee Bridles, with standing martin-gales to correspond. Kersey Horse Blankets and Dresses.--These goods are of their own manufacture and are most beautiful. The embroidery and style of finish must certainly gratify the most fastidious, the Kersey being made at the Mission Woolen Mills, which heretofore has been imported from England. In the Whip Department, they also exhibit, of their own manufacture, a large stock of Buggy, Carriage and Riding Whips, of assorted patterns and styles, as samples of their products in this line, which are worthy of an extended description. The buggy and carriage whips are of bare whalebone knotted (wrought handles), whalebone covered with cat-gut, with the maker's name elegantly worked in the handle. Some are mounted with silver and gold, from our own California and Washoe mines, and made especially for these goods on exhibition, the handles being of rosewood, malacea, ebony, ivory (plain and roped), mounted with pure silver and gold, elegantly wrought and chased and of various designs, representing dog and horse heads, fawns' feet, gold snakes, etc. The English hunting style of whips are of malacea and whalebone assorted, covered with cat-gut, mounted with massive silver dog and horse heads, hunting boat, etc. The riding whips present even a greater variety than the others, and are wrought in the same rich and varied style of those above described, all being made of whalebone in its natural state, which is far superior to the imported, which are boiled to obtain the oil the bone contains, thus rendering it brittle and much more liable to break. This being the pioneer manufactory in this line of industry, your committee recommend that a special Premium be awarded for these particular goods, and for Saddles and Harness.

First Premium.

JOHN WILSON & SON exhibit a magnificent Fire Cap, of their own manufacture, with a pure silver front, with gold letters and figures richly chased and engraved, indicating the number of the company it is intended for. There is on exhibition also an imported cap, a very fine one, but this is superior.

Premium.

KREITZ & COSBIE display, of their own manufacture, a fine variety of Concord style of Collars, superior to anything ever made in California, consisting of Stage, Express, Coach, Buggy and Team Collars.

Premium.

ALEX. LOGAN exhibits a very fine Patent Leather Collar, of his own make, of a particular style, known as the "Kay" Collar.

Premium.

TIBURCIO CARLOS exhibits an elegantly embroidered with silver and gold Mexican Saddle and Trappings, spurs and bits inlaid and chased with silver and gold, hair reins, cinches, etc., of his own manufacture, exceeding in richness anything exhibited.

Premium.

SEÑOR A. CAMPOS also exhibits a very good Mexican Saddle.

PEET & SON and others exhibit Mexican Saddles.

SUB-DIVISION—Boots and Shoes.**COMMITTEE:**A. SCHUMACHER, WM. LUMSDEN, FRANCIS WORTH,
J. L. WILLCUTT, J. G. HEIN.**Report:**

All the goods in this department of the Exhibition were of fine quality and workmanlike finish, and the committee, after careful inspection, report the following awards:—

GEORGE BURKHARDT, for the best Light Boots (Men's), Premium.

OBERMAYER & RAPPOLD, Men's Heavy Boots. Honorable mention.

THOMAS DOLLIVER, Ladies' Gaiters and Children's Shoes. Premium.

PETER DORN, Men's Riding Boot-Legs. Premium.

GEO. K. PORTER is entitled to a special Premium for six sample cases of common quality Boots and Shoes, which will compare favorably with imported goods of the class, and afford promise of success in this new branch of our home manufactures.

SUB-DIVISION—Fire Hose, Leather Belting.**COMMITTEE:**

E. A. WILSON, F. E. R. WHITNEY.

Report:

The committee report that there were two exhibitors of Fire Hose—M. N. COOK and H. MILLER. Each had samples of two classes of Hose—double and single-riveted. They were tested by coupling two lengths of the same class, one of each maker's, with a blind butt on the end, and attaching the hose to Stoddart's steam pump. Mr. Miller's double-riveted hose burst with a pressure of 170 pounds. The single-riveted hose was then tested in the same manner, Mr. Cook's bursting with a pressure of 165 pounds. This test was so decidedly fair that the committee have no hesitation in recommending a Premium to Mr. Cook for A I Double-Riveted Hose, and to Mr. MILLER a Premium for A I Single-Riveted Hose, and regret that there was no Eastern-made hose in competition, as the test was unusually severe, and we have no hesitation in saying (if within our province) that the necessity does not exist for our own corporation, or others in the State, to import in this line to the injury of our own mechanics.

HENRY MILLER is the only exhibitor of Belting, and the samples shown are fully equal, if not superior, to any of Eastern manufacture. The large double belting used for driving the machinery at the Exhibition was furnished by Mr. Miller, and though no competition was made in this line, we regard Mr. Miller entitled to a Premium for excellence in this important branch of manufacture.

WM. FREE exhibits several sections of Suction Hose and Leather Blunderbuss, which are entitled to most honorable mention.

SUB-DIVISION—Trunks, Valises, Traveling Bags.**COMMITTEE:**

JOHN FITZPATRICK, E. A. HUBER, R. DOWLING.

Report:

The display in this department does great credit to the enterprise and proficiency of the two exhibitors, who represent this branch of our manufactures in the Exhibition. The variety, quality and style of work shown, would not be surpassed in any city. After a careful examination of the different articles, we have arrived at the following decisions:—

JAMES LONGSHORE, S. F., has a beautiful Sole Leather Trunk and Valise, both of which are made in the very best manner and elaborately ornamented (the locks, riveted buckles, clamps and loops silver plated). He should receive the first Premium.

MESSRS STEELE & Co., S. F., have a very fine Sole Leather Trunk and Valise, exceedingly well made and nearly equal to the first named. This firm also exhibit a splendid Ladies' Saratoga Trunk, complete in all its provisions. This Trunk and the superior Traveling Bags they exhibit entitle them to a Premium.

Class XXI.**Paper and Its Manufactures--Book-Binding,
Etc.**

COMMITTEE:

JAMES LINEN,
GEORGE T. EMERSON,DAVID H. BALL.
LUCIUS THOMPSON.

Report:

EDWARD BOSQUI presents a large Ledger, meanly forwarded but beautifully finished. The ruling is the best at the Fair.

BARTLING & KIMBALL present a magnificent specimen of Blank Book-Binding, which was bound to the order of John Parrot. The design is elegant, and the volume beautifully forwarded, but the finishing is imperfect and clumsily executed. The same firm exhibit a Bible in two volumes, folio, bound in morocco, gilt edges, with an elaborate design on the sides. When the volumes are opened, they show large creases in the back part, which are peculiarly objectionable, and ruin the appearance of a costly work. Had the forwarding not been so wretchedly bad (the balance of the workmanship being elegantly executed), the binding would have been a credit to the State. A volume of the "Art Union," in morocco, with blank tooling on back and sides, is more chaste and elegant than the other volumes of greater pretensions. The committee think that Bartling & Kimball are entitled to the Premium for Fancy Binding.

HERMAN ALTHOF, in Buswell's Establishment, presents some very beautiful specimens of Morocco and Russian Leather Portfolios and Fancy Pocket-books. They are the best that have been exhibited here, and are justly entitled to the Premium.

L. BREIDENSTEIN.—His fancy Jewelry Cases and nice Boxes for confectionary purposes are elegantly executed, and merit a Premium.

HENRY C. BATEMAN exhibits specimens of Edge-gilding, fancy and plain. By long experience he has brought edge gilding to a state of high perfection. He competes in no other branch of the book-binding business. He merits the Premium in this line.

THOMAS REILLY—Gold Leaf Manufacturer—shows the process of his trade, by exhibiting the gold in the different stages of manufacture, from the time the metal is rolled out into ribbons until it is beaten into thin leaves, cut into squares, and ready for use. He also merits a Premium.

S. P. TAYLOR & Co., Pioneer Paper Mill, Marin Co.—The committee are delighted to notice the fine specimens of Wrapping and Printing Paper exhibited at the Fair by this enterprising firm. The manufacture of paper is a very important business in the community, requiring ability and capital to work it successfully. We hope that the public will sustain this praiseworthy undertaking, and that the time is not far distant when a sufficiency of paper will be manufactured in California to meet abundantly all the necessary demands of the Pacific coast. Give encouragement to enterprise and success will assuredly follow. The committee joyfully award the best Premium that the Institute confers upon merit.

SAN LORENZO PAPER MILL, Santa Cruz.—This establishment sends specimens of Straw Boards and Straw Wrapping Paper. There is no use in importing such articles when they can be manufactured in such excellent style at our own door. The bundles of boards and the reams of paper are creditable to the manufacturers and to the State of California. The exhibitors are cordially awarded a Premium.

H. MANNECK & Co. exhibit a fine assortment of Paste Board and light wooden Paper-covered Boxes. The extent and variety of the assortment indicates the growing importance of this new branch of our domestic manufactures. Messrs. Manneck & Co. are entitled to credit for the excellent quality and tasteful finish of the goods exhibited, and, although there was no competition in this line, they well merit a Premium.

G. F. M. GLOVER exhibits samples of Paper Cutting for decoration, beautifully and tastefully executed.

Premium.

GEO. B. HITCHCOCK & Co. exhibit a case of splendid

Blank Books, which were bound by Messrs. Buswell & Co. For counting-room utility and creditable specimens of ruling, sewing, forwarding and furnishing, there is nothing superior to them in the Fair. As they were entered by the sellers, and not by the manufacturers, your committee refuse to receive them as books for competition, believing, as they do, that persons who merely give orders and pay for them in the common way of business have no right to compete for honors that belong only to the producers or manufacturers.

[I fully agree with this report, with the exception that I think Geo. B. Hitchcock & Co. are entitled to competition by the rules of right and justice.

LUCIUS THOMPSON.]

Class XXII.**Glass, Porcelain, Etc.**

Report:

The extensive display of wares made by the PACIFIC GLASS COMPANY furnished a striking evidence of progress in the development of our manufacturing resources, and the gentlemen whose capital and energy have overcome the numerous difficulties encountered in the experiment of manufacturing glassware of the class required by our great producing interests, can scarcely be more gratified than the public at large with the evidence of success afforded by this exhibition. From an octagonal base twelve feet in diameter, a series of terraces rising to a height of fourteen feet, filled with a great variety of Wine, Soda, Sauce and Mustard Bottles, Pickle and Fruit Jars, Prescription Phials, Lamp Chimneys, etc., crowned with a huge Acid Carboy, gave assurance that the days of dependence upon uncertain imported stocks, and the gleanings of the chiffonier have passed away. It is only about two years since this enterprise was inaugurated, and the progress made in this period appears in the highest degree creditable and encouraging; and it may be hoped that it will be found practicable and profitable to extend it to embrace the manufacture of every description of Glass and Glassware Premium.

J. MALLON & Co., exhibited specimens of Ground and Cut-Glass, for transom and side-lights, windows, signs, etc. For design and execution these specimens would rank with the best work to be found in the large Eastern cities, and they merit a Premium.

D. BRANNAN exhibited Stoneware and Terra Cotta Architectural Ornaments, which have been noticed and recommended for Premium by another committee.

H. HEIZER exhibited a lot of Crucibles and Muffles, also noticed and recommended for Premium by the committee above referred to.

HAYNES & LAWTON exhibited a fine assortment of rich American Cut and Flint Glassware, French, China, Parisian and Bronze Statuettes, Vases, etc.,—all imported.

R. A. SWAIN & Co. also made a fine exhibition of rich imported Glass, Porcelain and Plated Wares.

JOHN TAYLOR had on exhibition an extensive assortment of Chemists', Assayers' and Apothecaries' Scales, Crucibles, Retorts and other utensils.

A. SON, W. LUDEMAN, and H. SCHUMANN, each had a show case of fine Meerschaum Pipes and other fancy articles.

HAYWARD & COLEMAN made a fine exhibition of imported Lamps, many of them of the richest pattern and finish. They also exhibited a Lantern of home invention and manufacture, furnished with a kerosene lamp and concave reflector. Several of these lanterns were employed by the night watchmen at the Pavilion, and the testimony as to utility and efficiency, is ample to warrant the award of a Premium.

Class XXIII.**Coal Oil, Turpentine, Rosin, Compounds,
Soap, Etc.**

COMMITTEE:

D. S. CUTTER. D. KANARY, J. H. C. PORTMAN.

Report:

While petroleum oil springs of much promise are

found in many places in the State and elsewhere on the coast, they do not appear yet to have been successfully worked to any extent. Since the outbreak of the rebellion, which has sealed up the old sources of supply, the business of gathering and distilling pine pitch has been greatly stimulated here, and withal is reported to have occasioned much needless destruction of valuable timber. Severe statutory enactments have been found necessary to arrest this waste, and much more care is said to be now exercised in the prosecution of this business, which yields a considerable surplus for export after supplying the home demand.

E. BENOIST exhibited samples of Crude and Refined Coal Oil from the Buena Vista Petroleum Works, in Mariposa county. Premium.

J. H. CHURCHILL is entitled to the credit of a new process of Extracting Petroleum Oils. Premium.

W. C. JONES, for the best samples of Turpentine and Rosin, is entitled to the Premium.

HUCKS & LAMBERT, for the best sample of Pitch, and for their superior Axle Grease, should receive a Premium.

J. F. FUGAZI, of Marysville, for the best quality Cologne, Premium.

H. L. BESSEMER exhibited samples of Pomatum, Hair Restorative, Cosmetics and Tooth Powders, handsomely put up and agreeably perfumed.

SUB-DIVISION—Soap.

W. H. BOVEE, COMMITTEE: J. H. CHURCHILL.

Report:

THE EUREKA SOAP CO. exhibited a Soap, of superior quality, for general use, and are entitled to a Premium.

THE STANDARD SOAP CO. had also on exhibition samples for competition.

FRANCIS LEPHART had a sample of excellent Soap, but without particulars which would place it fairly in competition.

Class XXIV.

Stone-Cutting, Masonry, Etc.

Report:

Two contributions alone can, with any propriety, be classed under this head.

JOHN GUINANASCO exhibited a unique specimen of Composition Flooring, formed of small stones, of various natural colors, set in cement, and rubbed down to a smooth, even surface. The colors were arranged in figures, forming an agreeable pattern in miniature Mosaic. The practical value of such a flooring would, of course, depend in its cost and quality of durability.

SOME CONTRIBUTOR exhibited two barrels of very superior Lime, but failed to make any entry of his name or the contribution. The quality of the lime was generally noticed with approbation, and would entitle the producer to the Premium if he can be identified.

Class XXVI.

Oil Painting, Photographs.

Report:

The Fine Art Department of the Exhibition, in the variety, number and excellence of the contributions, surpassed all expectations. The constant pre-occupation of the great body of our new and partially floating population in the more material pursuits of alluring promise or necessity, has afforded no great degree of encouragement to the art student, either in the way of inspiration or patronage; but the evident relish with which thousands of visitors, day and evening, for a month, enjoyed this exhibition, bespeaks the dawn of a better day for the art interests among us. The Painters and Photographers elected to exhibit their works without engaging in competition for Premiums. One of the four galleries, 27x100 feet, was occupied with the works of the resident oil painters. The walls of another, of similar dimensions, were filled by the photographers. The remaining two were crowded with Paintings, Drawings, Engrav-

ings, Statuary, Wax Work, Tapestry, Pictures, Fancy Shell, Moss and Hair-Work, Curiosities, etc., forming, in the whole, an extensive museum and art exhibition of uncommon excellence and attraction.

Class XXVII.

Drawing, Penmanship, Etc.

SUB-DIVISION—Architectural and Mechanical Drawing.

COMMITTEE: M. F. BUTLER, T. GROB.

Report:

The Premium for Mechanical and Machine Drawing is awarded for the specimens exhibited by the pupils of the "Industrial Drawing Academy."

And the Premium for Architectural Drawing to L. E. REYNOLDS.

SUB-DIVISION—Penmanship.

COMMITTEE: F. SEREGNI, T. GROB, V. SQUARZA.

Report:

The committee consider it necessary to make a distinction between Practical and Ornamental Penmanship, and they find, after careful examination and comparison, that LUCIUS M. FERNANDEZ is entitled to the First Premium for Ornamental Penmanship.

F. S. BUTLER merits the Second Premium, or honorable mention.

W. G. DOOLITTLE merits the First Premium for the Best Commercial Handwriting.

H. G. WALTON merits an honorary award for the beautiful regularity, order and perfection of Pen-Work, shown in his specimens of "Compilation and Penmanship," "Statistics of the Mariposa Estate."

Class XXVIII.

Sculpture, Marble and Wax Work, Etc.

SUB-DIVISION—Sculpture.

COMMITTEE: THOS. HILL, O. GORI, B. TAFT, J. B. WANDESFORD, FORTUNATO ARRIOLA.

Report:

Your committee, appointed to adjudge upon the merits of the works in this department of the Exhibition, find that while several of the competitors present works of considerable merit, those of Mr. MEZZARA are entitled to the highest award for excellence. Premium.

MR. P. J. DEVINE'S Marble Bust of a Child is very meritorious, and in opinion of the committee, his is the best Plaster Bust of the late Rev. Thomas Starr King which has yet been exhibited.

SUB-DIVISION—Wax Work.

COMMITTEE: P. MEZZARA, FORTUNATO ARRIOLA, M. F. BUTLER.

Report:

The work of this class comprised many exquisite imitations of Fruits, Flowers, Shells, Parian Statuary, etc.

The Premium for Wax Flowers is due to MADAME MIEL, whose imitations are the most perfect and beautiful of any we have ever met with.

MRS. A. UNGER and MRS. M. COMFORT each had beautiful specimens of Flowers, which should be honorably noticed.

MISS LOUISA McLANE is entitled to honorable mention for excellent pieces of imitated Fruit.

MRS. J. B. HARMSTEAD had a fine and very extensive collection of Wax Works, comprising, among other subjects, some exquisite imitations of the most ornate and

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delicate Parian Wares. The talent and industry represented in the handsome collection exhibited by this lady, entitle her to the award of a Premium for General Wax Work.

Class XXIX.**Sign, Ornamental Painting, Graining, Etc.***Report:*

In this department the number of contributions was comparatively small.

HENRY PAULISSEN exhibited several specimens of Fresco Painting on Plaster. The designs were very well executed for effect, and the colors remarkably brilliant. No competition was offered in this line. Premium.

HOPPS & KANARY exhibited a very finely executed piece of Glass Plate Sign Painting. Premium.

D. and G. WINTER each exhibited good specimens of Gilding and Embossing on Glass.

C. & G. W. HUTCHINSON exhibited handsome specimens of Block Letters for Signs.

E. TUBORQUE—Several well-painted Signs.

A. & T. TORNING—A handsome specimen of Sign-writing.

D. A. STERNE, of Watsonville—Panel specimen of Ornamental Coach Painting.

F. T. McAULIFF—Samples of excellently Imitated Rosewood, splendidly polished. Premium.

Class XXX.**Boats. Ships, Models, Etc.***Committee:*

L. L. BATCHELDER, **THOS. BIGLEY**, **H. S. BROWN**.

Report:

JOHN REED exhibits a Life Boat (model), combining good lines and bearings, with remarkable air-chamber capacity, and a provision of valves so arranged that the buoyancy and motion of the boat will relieve her of any water which may be shipped. The builder states that he first constructed the boats on this plan in Boston, where they were subjected to test, and adopted by the Massachusetts Humane Society. The plan is certainly deserving the inspection of that class of our citizens whose duty it is to provide for the safety of those who "go down to the sea in ships," and to them we commend it with our award of Premium.

MR. REED also has a well built and moulded Four-oared Boat in the Exhibition.

RONALD COOK, of Benicia, exhibits a large Iron Life Boat, built in the most thorough and substantial manner.

C. COYLE exhibits a Four-oared Race Gig of the leanest and lightest mould, well calculated to tempt our young men to a practice not yet so popular here as in the Eastern sea-board cities, where exercise with the oar is thought as conducive to health and manly accomplishment as practice with the billiard cue.

Premium.

W. B. HOYT exhibits a Skeleton Boat, for a pair of Sculls, and as a specimen of nice cabinet boat building it is very admirable.

J. T. JONES exhibits a beautifully cut Half Model for a Yacht. The lines are easy and very fine, but might possibly be improved with a little more floor amidships.

MELVIN SIMMONS exhibits an elegant Half Model Pilot Boat, showing well-defined lines and good bearings, insuring speed and buoyancy. The excellence of this model entitles it to a Premium.

KIMBALL & THAYER exhibit a very fine Half Model Schooner, well moulded for speed and carrying capacity.

D. C. M. GOODSELL exhibits a number of Builders' Half Models, embracing several for iron-armored gun-boats, rams and floating batteries, together with a section showing a plan of attaching armor-plates without exposing bolt or screw heads. These models have the merit of originality in several features, and it is very plausibly claimed by the exhibitor that ships upon the plan shown would effectually resist shot with much lighter clothing of armor-plates than is found necessary

upon those constructed on the original "Monitor" plan. The committee do not feel competent to pass upon the merits of these claims which could be determined by a committee of naval or military engineers only upon a practical test.

S. MARION exhibits two finely-proportioned and fitted full-rigged Model Ships; one, the "Exempt Fireman," is remarkably "ship-shape" from keelson to truck, every spar, shroud, stay and brace testifying to the zeal, skill and patience of the maker, whose ideal ship is so perfectly wrought out in miniature. Mr. Marion deserves a Premium.

PETER WILSON exhibits a full rigged Model Ship, regularly framed and planked, but deficient in mould and proportions.

There are one or two other Models in the Exhibition, of more or less merit, but not entitled to special mention.

Class XXXII.**Fire-Arms.***Committee:*

O. H. BOGART, **A. B. NUTTING**, **W. H. BROWN**,
(**J. W. KIPINGER** dissenting.)

Report:

The competitors in this department engaged in the exhibition with the spirit and confidence of men conscious of merit and the ability to show work which any workman might be proud to claim, and the duty imposed on the committee was one of no ordinary delicacy and difficulty. The competition was made solely on Double-Barreled Shot Guns and Rifles, and the committee, after careful comparative examination, award to **R. LIDDLE & Co.** the Premium for the Best Double-Barreled Shot Gun.

A. J. PLATE & Co. are entitled to honorable mention for a Double-Barreled Shot Gun, of fine quality.

J. VILLEGLIA is also entitled to honorable mention for Guns of fine quality and excellent finish.

JOHN BACH is awarded the Premium for the Best Rifle.

Class XXXIII.**Wines, Liquors, Cordials, Etc.***SUB-DIVISION—California Wines.**Committee:*

N. LUNING,
M. CODY,

L. J. CZAPKAY,
B. B. REDDING.

Report:

The marked improvement made each year in the quality of California Wines is noticed with satisfaction by the committee. The products of the same vineyards in 1863 are superior to those of previous years. The improvement is doubtless due, in part, to acquired experience, but chiefly, in opinion of the committee, to greater care in selecting the fruit at the proper stage of maturity, and to greater neatness in conducting all the processes of the manufacture. Some of the Wines offered in this exhibition would rank as superior in their class in the wine countries of Europe. The samples offered in competition were submitted to the committee, distinguished only by numbered labels, designating the age and class, an officer of the exhibition retaining the reference list corresponding with the numbered labels. Considering it proper that honors should be awarded to producers only, the Committee adopted a resolution, directing that the name of the producer or vineyard, alone, should be mentioned in the report.

White Wine, Vintage 1863—First Premium, **O. W. CRAIG**, Second Premium, **M. KELLER**, Los Angeles. Both of the above Wines are of superior quality for one year's growth, and so nearly equal that the committee hesitated whether to award the First Premium, but decided as above.

White Wine, Vintage 1862—First Premium, **HENRY GERKE**, Tchama county.

White Wine, Vintage 1861—First Premium, **UNITED ANAHEIM WINE GROWERS' ASSOCIATION**; Second do., **MOUND VINEYARD**.

White Wine, Vintage 1860—First Premium, **KOHLER & FROHLING**, Los Angeles; Second do., **B. D. WILSON**, Los Angeles.

Of the White Wines vintage 1857 and 1859 there is but one sample exhibited of each, and in the opinion of the committee neither is worthy of premium.

Hock, Vintage 1862—First Premium awarded to DR. Woods, of Napa; no competition, but the committee find it worthy of special commendation.

Hock, Vintage 1856—First Premium, KOHLER & FROHLING, Wolfskill's Vineyard, Los Angeles.

Hock, Vintage 1859—First Premium, KOHLER & FROHLING, Wolfskill Vineyard, Los Angeles—no competition. This wine having been shipped via Cape Horn, the committee believe it has improved considerably.

Red Wine, Vintage 1863—First Premium, HARASZTHY & GIOVANARI, Laehryma Montes Vineyard; Second do., HARASZTHY, Quiquiriqui Vineyard.

Port, Vintage 1862—Premium awarded to D. B. WILSON's Vineyard, Los Angeles.

Red Wine, Vintage 1862—First Premium, UNITED ANAHEIM WINE GROWERS' ASSOCIATION; Second do., W. O'DONNEL, San Jose.

Red Wine, Vintage 1861—Premium awarded to J. S. HITTLL.

Port, Vintage 1860—Premium awarded to D. B. WILSON's Vineyard, Los Angeles, with the unanimous opinion of the committee that this is the most excellent wine of its class on exhibition.

[Note—This wine is of such excellency, and so much superior to any exhibited of this kind of wine, that the committee were inclined to doubt whether it was entirely a California production.

Port, Vintage 1858—Premium awarded to KOHLER & FROHLING, Coronel's Vineyard, Los Angeles.

Port, Vintage 1859.—No competition—Premium awarded to KOHLER & FROHLING's Vineyard, Los Angeles. This wine has been shipped via Cape Horn, and the committee believe it has improved considerably with the voyage.

Sherry—First Premium, D. B. WILSON's Vineyard, Los Angeles; Second do., M. KELLER's Vineyard, Los Angeles.

Madeira—Premium awarded to M. KELLER's Vineyard, Los Angeles.

Angelica—First Premium, U. A. W. G. ASSOCIATION; Second do., D. B. WILSON's Vinyard, Los Angeles.

SUB-DIVISION—Liquors, Cordials, Etc.

COMMITTEE:

DR. I. ROWELL, DR. L. J. CZAPKAY, F. C. BELDEN.

Report:

The committee, in conducting the examination of the articles offered for competition in this department, had no means or desire to know the samples of the several competitors. The bottles were numbered, and the samples passed upon under these fictitious designations, subsequently identified by the reference list corresponding with the entry book of the Exhibition.

Grape Brandy, 1859, no competition—Premium to Kohler & Frohling.

Peach Brandy, 1859, no competition—Premium to Hobbs, Gilmore & Co. The committee find this an excellent article.

Grape Brandy, 1861, no competition—Premium to United Anaheim Wine Growers' Association.

Grape Brandy, 1862—Premium to Haraszthy & Giovani. The committee find this brandy an excellent article, and much superior to those samples in competition against it.

Pear Brandy, 1863, Peach Brandy, 1863, Apple Brandy, 1863, no competition—Premium to W. O'Donnell, San Jose.

The committee report favorably on the Currant Wine exhibited by Mrs. Barnes.

Aquardiente, 1859, no competition—Premium to Kohler & Frohling.

The committee report favorably on the Rum Extract exhibited by A. Fenkhausen.

The committee find the Blackberry Cordial exhibited by E. I. Barra a very superior tonic and astringent, and worthy of recommendation.

Bitters—First Premium to V. Squarza; Second do. to Byrne & Castree. The above bitters are a selection of six different samples, and the committee, having debated some time on the qualities of each, decided as above.

The committee award First Premium to V. Squarza for Punches and Cordials. The committee, after a careful examination of the Squarza Punches, unanimously declare them to be composed of the best material, and manufactured with science and utmost care.

[As by the rules of the Exhibition no second or other inferior grade of Premiums are allowed, the awards of "Second Premium" made by the committees will be taken to signify the rank of the product honorably distinguished.]

The New York Brewery is awarded the Premium for the Best Lager Beer.

Class XXXIV.

Horticultural, Botanical, Etc.

SUB-DIVISION—Fruit.

COMMITTEE:

O. C. WHEELER, A. MARTIN, J. B. KNAPP.

Report:

The undersigned, appointed a committee to examine the fruits on exhibition, beg to submit the following brief notes:—

All the Fruits to which the attention of your committee was called by the Director in charge of that department were exhibited by ten gentlemen, and more than one-half of the whole by one of the ten. While the fruit show, as a whole, is by no means large in quantity, and is actually small in the number of participants, it is worthy of all praise in the self-sacrificing spirit which induced it and the quality of its specimens. To illustrate: Mr. James R. Nickerson, of Placer county, who needed no addition to his reputation as a fruit-grower of the first-class, at an expense of hundreds of dollars, brought with him, a distance of nearly two hundred miles, an amount of fruit, of large money value in the market and in variety greater than any one man ever before exhibited in this State, arriving here in time to give the Fair the full benefit of his industry on the day originally advertised for its opening. The delay and postponement from time to time kept him here at large expense, and to the utter destruction of no inconsiderable portion of his best specimens. He nevertheless remained here until you were in the full glow of successful progress, and then went home to replenish his tables with fresh specimens from day to day, as those on exhibition failed, thus showing a devotion to the interest of the Exhibition perhaps never equalled on this coast. Other exhibitors during the Fair have done the same thing, though in smaller measure.

MR. J. R. NICKERSON, of Lincoln, Placer county, exhibits 223 varieties of Apples, generally well grown and fine specimens. From this large number of varieties, some 20 or 25 varieties might be selected which would be equal to the best, and would grace the finest market in the world, the whole year round—an assortment that would leave little to desire in this the "king of fruits." 103 varieties of Pears, to which the above remarks apply with equal force. Eighty-five varieties of Grapes, among which your committee notice as large and handsome, the Palestinc, White Muscat of Alexandria, Black Hamburg, Rein de Nice, Royal Muscadine, Fisher-Szlagos, Purple Damascus, Blue Malaga, and several others, which, though of small size, were exceedingly rich and well flavored. He also exhibits raisins of both last and this year's production, which promise, under favorable circumstances, to range high in the scale of excellence. Mr. Nickerson also exhibits 20 varieties of Peaches, 8 of Quinces, 5 of Figs, 4 of Plums, Pomegranates, English Walnuts and Paper-shell Almonds, to the superior excellence of the latter of which the attention of your committee was especially called, and to which they bear unqualified testimony. He also makes an exhibit of Dried Fruits, among which are Pears, Apples, Peaches, Plums, Cherries, Blackberries, Raspberries and Figs, which for beauty and excellence we have rarely seen equalled. Your committee was happy to learn from Mr. Nickerson that he had already decided to reduce very largely his number of varieties, and confine himself to the culture of a few of the best. No doubt many fruit growers in this State might profit largely by adopting a similar course. Mr. Nickerson is entitled to the Premium for the largest exhibit of fruit and the best dried fruits.

MR. T. DELPOIX, of Stockton, exhibits 14 varieties of Grapes, one bunch each, all very fine, and several of superior beauty and excellence.

MR. MARK FORNEY, of San Jose, exhibits 39 varieties of Pears, of which several were finely grown, and 9 of Grapes, which, though not all fully matured, make a most creditable display.

Messrs. L. F. SANDERSON & Co., of San Jose, occupy a table with 44 varieties of Pears, which, taken as a whole,

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are superior to any other pear exhibition in the Pavilion. Their Buerre Clarigeau is of such superior form and beauty as to constitute a marked feature in the room. Premium for best exhibit of pears.

J. C. WHITE, of Sonoma, exhibits 60 varieties of Apples, generally well grown, and some of them decidedly fine. His Red Siberian Crabs are as good as we have ever seen.

Mr. WM. O'DONNELL, of San Jose, being one of the Directors, declines to compete, and yet few persons have added so largely to this department of the exhibition. His 26 varieties of Apples and 29 of Pears, and his Grapes, bottles of Wine, and Bouquets, and rare Pot-plants, Flowers and Evergreens, all from his nurseries, show that he has few peers in the State.

Mr. D. E. HOUGH, of Oakland, exhibits 113 varieties of Pears, all from his nursery, many of which are as strong witnesses of his own taste as any culturist need wish.

Mr. S. J. BARNWELL, of Mountain Farm, Santa Clara county, exhibits a fine assortment of Grapes, and one variety of Plum—"Blue Imperatrice"—which was of superior quality.

MR. M. R. MILLER, of Pleasant Valley, Solano county, exhibits a box of Raisins from White Muscat Grape, of good quality, made this year.

MR. B. N. BUGBY, of Folsom, Sacramento county, exhibits two boxes of Raisins, made from the Fisher-Szhagos Grape, one in 1863, the other in 1864. [This grape is propagated under several different names, as "Hungarian Wine," "White Malaga," "Raisins," etc. The above name is true—its orthography being obtained from a native Hungarian gentleman and scholar familiar with the vineyards of that country, where the grape originated.] The latter is his better work. The raisins made last year were good, those of this year far better, and as yet the best ever exhibited in the State. As Mr. Bugby intends to make a business of putting up raisins, a remark or two may not be wholly obtrusive: 1st. In this climate—that of our interior valleys and mountain slopes—the first danger is that the grapes will be "sun-burnt" on the vines; to a degree which, though scarcely visible, will interfere with the perfection of their maturity—the second, that they will "sun-scald" after being spread upon the drying-tables, to prevent which much turning over at the commencement of the drying will be necessary. 2d. In this country where there is such a morbid taste for large size in fruits [your committee is happy to note a most desirable reformation on this point now in progress], there is danger that the raisin-grower, in his desire to produce large clusters of raisins, will foster a too thickly set order of grapes, which will seriously interfere with the thorough curing of the interior berries, and thus militate against the quality of his crop. All educated vienists know that compactness or openness of clusters, in the same variety, depends largely upon the training and culture of the vine. No "bunch" of raisins look as well, or is intrinsically as good as an open, loose, fringy "stem" of raisins, of the same variety, and cured with the same care. Hence the variety of grapes which naturally assumes this latter habit is, other things being equal, more desirable; and if it has not this habit pains must be taken by every producer who aspires to the highest excellence, to change the habit. The variety grown by Mr. Bugby has many excellencies. It "strikes root" from cuttings with great readiness, grows vigorously, fruits early, regularly and abundantly, is of fair-sized berry, rich flavored (increased in the raisin), and its pulp, though not the most solid, so good that the shrinkage in drying is comparatively small. Yet it has the natural habit, and is very "set in its way," too, of clustering too thickly—i. e., it sets so much in a bunch as to require too much care and too much time to cure it properly, unless pains be taken to so cultivate and train the vine as to produce a change in this natural habit. The White Muscat of Alexandria is perhaps equal to the Fisher-Szhagos in its propagating and growing qualities, while in the certainty of its crop, and possibly in its early bearing, it may not be equal, yet it is of finer berry, of more solid pulp (which loses less in drying), of equal flavor, and of so open, loose a growth

as to be in this particular far the superior. These hints are thrown out as the result of long observation and some practical experience upon this subject as a specialty. We bid Mr. Bugby a most hearty God speed in his noble enterprise of stopping the importation of a quarter of a million dollars' worth of raisins annually on this coast. Mr. Bugby is entitled to a Premium for the best raisins.

Your committee are among those who have watched and worked in the fruit growing interest of this State from its beginning, and hence indulge another hint, viz: that fruit growers at once, and all the time, persistently and practically insist that, in fruit especially, quality and not size is the true test of excellence. And another, that there can never be attained the highest excellence in pomology without a careful study of the laws of adaptation—adaptation to soil, to climate, to season, and to circumstance. It is of no avail in our climate that experience authorizes the great pear-grower of New England, Hon. M. P. Wilder, to say that if he "must be confined to one variety of pear, it should be the Vicar of Winkfield." While his judgment is well founded there, it would be a gross burlesque here. The "Vicar of Winkfield" is a failure in California, not in size but in quality. Few men have grown it in this State without pecuniary loss; and after a trial of fourteen years, under every variety of advantage, if a fruit is still a failure, the whole community should discourage its farther propagation, especially when its place is more than filled by varieties far its superior in every quality that constitutes excellence. The above remarks apply with still more force (because it was never valuable except for the monstrosity of its size) to the "Pound Pear." However large, they are no ornament to a fruit table in the eyes of any cultivated pomologist. While there may be many other suggestions of equal importance, these have impressed your committee as already "over due," and hence are made as a matter of duty, not of choice.

Your committee on Fruits beg leave to suggest that, in view of the great devotion to the interests of your Fair on the part of Mr. James R. Nickerson, of Placer county, and the large outlay to which he has voluntarily subjected himself, you, as a testimonial due to his enterprise, constitute him an Honorary Member of your body.

SUB-DIVISION—*Seeds.*

COMMITTEE:

O. C. WHEELER,

ADDISON MARTIN.

Report:

There was only one exhibition of Domestic Seeds in the Fair, and this was made by Mr. DANIEL L. PERKINS, of Oakland, Alameda county, and consisted of 112 varieties of Seeds and 5 varieties of Corn. Mr. Perkins is well known as the pioneer professional seed-grower on this coast, and has now attained a reputation for the purity, vitality and excellence of his seeds, of which any man might well be proud. His exhibition at the present Fair is a testimony to his high order of skill and taste. A beautiful pyramid, studded on all sides to its apex with regularly arranged glass bottles, all properly labeled, gives the observer a most interesting view of this large number of varieties. Mr. Perkins is already reaping the reward of his patient toil, scientific skill and persevering energy, in the large orders for his seeds, made in advance of the crop, from the best seedsmen on the coast. His seeds have also been sent to the Eastern States, and have there been so much admired that he has standing orders to send regularly his full variety. In a short time the importation of garden and flower seeds, except new varieties, must cease.

Premium.

S. W. MOORE had a good assortment of imported Grass and Garden Seeds, which are entitled to special mention.

SUB-DIVISION—*Silk Culture.*

L. PREVOST, of San Jose, COCOONS, WORMS AND REELED SILK.—This exhibition was probably regarded by most visitors as the product of some merely fancy-cultural pastime or experiment, of no practical significance or value, while the facts are, that it represented a series

of efforts undertaken upon a conviction of the adaptation of our climate for silk growing, and persistently followed up for years, until it seems to be demonstrated beyond doubt that that it is to become a great industrial interest of the State. It is nearly eight years since Mr. Prevost engaged in experimenting in this line of culture, encouraged by Henry Hentsch, Esq., of this city, whose interest and faith in the undertaking was so great that he imported several lots of eggs from China and from France before obtaining any sufficiently healthy to hatch. It was thus several years before any worms were produced, and the first cocoons were raised in 1860. Samples have since been sent to Europe for examination, and Mr. Prevost has certificates from the highest authorities of Paris and Lyons pronouncing the silk FIRST QUALITY.

And it is certain that the silk growers of France and Italy will in the future look largely to California for supplies of sound eggs to recuperate their stocks, which cannot be preserved in healthy breeding condition in climates subject to rain during the feeding season. Already the orders received by Mr. Prevost from these countries are many times larger than he can fill, and indicate that the supply of such orders alone, without reference to the growth of silk, will furnish ample and highly remunerative employment to those engaging in the culture here. The mulberry is said to thrive remarkably in all parts of the State, and our climate affords peculiar advantages, upon which Mr. Prevost has presumed, with entire success, to abandon the laborious and expensive culture practiced in the silk countries of Europe, requiring six times the attention and labor found necessary in the "California Culture," which he has systematized.

There can scarcely be more assurance than is afforded by the experience of Mr. Prevost, of the entire practicability of the profitable prosecution of the SILK CULTURE here. Other gentlemen, well informed upon the matter, are preparing to engage largely in it, and it is not improbable that within less time than has elapsed since Mr. Prevost's first experiments, it will rank with Wool and Wine, or lead them among the important productions of the State.

The highest award of the Exhibition is due to Mr. Prevost.

SUB-DIVISION—Floriculture, Etc.

Report:

In our climate and locality the late Summer and Autumn is an unfavorable season for a floral exhibition, unless large preparations be made for it months in advance. As the florists in the spring remove their stock from pots to the ground (where they require but little care until the rains return again), therefore few of them are able, upon call, at this season to make an extensive show of choice varieties; yet the floral department of the Fair did not lack features of interest. The lattice tower under the great dome, rising from the middle of the fountain to a height of forty feet, bore upon its terraces a great variety of fine evergreen shrubs and flowering plants, from among which started the numerous water jets refreshing the air, and sparkling in the light as they flashed upward and fell in light sprays to the basin. Seen above other objects from any part of the Pavilion, this central tower, with its evergreen embellishments and fountain jets, formed a grand and agreeable feature of the Exhibition.

JOHN O'HARE, of the California Nursery, notwithstanding the disadvantages of the season, exhibited an extensive and choice selection of Green House Plants, Dahlias, Verbenas, Lilies, Cut Flowers and Bouquets, frequently during the Fair renewing his stock, and thus maintaining the charm and freshness of his exhibition. Mr. O'Hare also contributed many of the choice evergreens and plants for the adornment of the Floral Tower. The Premium for the best collection of Green House Plants, best Dahlias, best Verbenas, best Lilies, and best Bouquets, is awarded by the committee to Mr. O'Hare.

LANZEUR & HUBERT, of the St. Ann's Garden, exhibited a great variety of magnificent Fuschias, Geraniums, Dahlias and Green House Plants, which were frequently renewed and greatly admired. Some of the Fuschias,

especially, were of gigantic growth, and thickly piled with flowers. The Premium for the best Fuschias and Geraniums is awarded to Lanzeur & Hubert.

C. B. MILLER'S Aquaria, Wardian Cases, Rustic Baskets with trailing vines and rare plants, arranged under a large octagon wire summer-house, of elegant design and structure, formed one of the most beautiful and attractive exhibitions in the Fair. The summer-house, manufactured and exhibited by H. T. GRAVES & Co., formed an admirable and appropriate canopy and enclosure for this interesting collection. The Aquaria exhibited by Mr. Miller, and manufactured for him here, are formed entirely of iron and plate glass, and are much lighter and more elegant than those formed of marble, the material still used, in part, at the East and in Europe for those of the dimensions of his largest. Scarcely anything is more interesting than one of these large crystal vessels with its provision of delicate aquatic plants and varieties of fish darting through the clear water, or exploring the miniature rock and coral caves. The plants, if properly selected, supply the water with oxygen, which will keep it clear and pure for months without change, and a provision of pipes will effect a change when required without trouble. The Wardian Cases, covering beautiful and delicate ferns and mosses, growing without care or attention, the orchids or air plants rooted upon cocoa-nut husks and fragments of bark, or hanging upon sea shells, together with many other rare botanical wonders, contributed to make this a highly interesting and instructive exhibition, for which Mr. Miller is well entitled to a

Premium.

FRANK STAEGLICH contributed a large and fine assortment of Grass and Garden Seeds, specimens of a great variety of growing Grasses, Evergreen Shrubs and Plants; but the model Labyrinthine Garden exhibited by Mr. Staeglich was the great wonder and puzzle of the Fair. This consisted of a plot 6x8 feet, laid off with shell-walks, bordered by lines of box hedges, making a linear measurement of several hundred feet, running in parallel and rectangular lines in such a manner that it was impossible for the uninstructed visitor to find the way either in or out from any given point. This was not only an ingenious and interesting puzzle, but a work involving great labor and expense, the grounds being planted with several hundred miniature trees, perfectly rooted and sown with fine grass, which formed a natural coat of verdure. Mr. Staeglich's ingenuity, patience and zeal merit a.

Premium.

COL. WALKER, of the Golden Gate Nursery, sent in, on two occasions, when about to bloom, a fine Night-Blooming Cereus ("Cactus Grandiflorus,") placing the Directors under great obligations in thus affording visitors an opportunity of witnessing the interesting phenomenon of its rare and transient glory.

CAPT. J. D. FARWELL also laid an obligation on the Managers by the contribution of a magnificent stalk of the "Yucca Gloriosa," bearing a conical pile of fully opened flowers, numbering hundreds and perhaps thousands. Brought in early and planted in wet sand, this floral wonder retained its beauty nearly to the close of the Fair.

JAMES LICK, Esq., manifested an interest which he has always shown in the Exhibition and affairs of the Institute by the donation of a splendid collection of China Aster ("Aster Chinesis,") in the stage of most perfect flower, and undoubtedly one of the finest lots of that beautiful Autumn flowering plant ever seen here.

Class XXXVI.

Domestic Machinery—Sewing and Washing Machines, Wringers, Churns, Etc.

SUB-DIVISION—Sewing Machines.

COMMITTEE:

S. O. BRIGHAM,
O. C. WHEELER,
MRS. H. ROSEKRANS,

A. F. HITCHCOCK,
MRS. C. M. BLAIN,
MRS. A. J. TURNER.

Report:

The keen competition usually made by the leading

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Sewing Machine Agencies was not maintained in this year's Exhibition—the "Florence" Machine being the sole occupant of the field. The several patterns and styles of this new Sewing Machine exhibited by the Agent, SAMUEL HILL, your committee have carefully and minutely examined. Its simple and finished mechanical construction, and the obvious adaptability of each part to its work has been to us an interesting study. It differs essentially from other sewing machines, having many new and peculiar features. It makes four kinds of stitch, each alike, on both sides of the fabric, has an instantly reversible feed motion, and sews any varying thickness of material, without change of tension. We consider the Florence a decided improvement in sewing mechanism, and deem it worthy the award of a silver medal; and for the beautiful samples of sewing machine work done on this machine we would recommend a

Diploma.

[Only the Premium recommended for the work done on the machine can be allowed, as the awards of the Exhibition are confined to articles produced or manufactured on the Pacific coast or the neighboring islands.]

SUB-DIVISION—Washing Machines, Wringers, Churns, Etc.**COMMITTEE:**

R. A. MARDEN, DAVID DODGE, C. J. MORRISON.

Report:

Most of the articles in this department offered for the inspection of the committee would require practical experimental tests to determine fully their adaptation to the uses for which they are designed, and it was not in the power of the committee to apply such. They are consequently obliged, after a careful examination, to make up their judgment chiefly upon the mechanical construction and apparent adaptation of the articles to the uses proposed.

In the classes of Washing Machines, a spirited competition was maintained by the "Challenge," "Economy," "Little Giant," and "Monitor." Each of these machines appears adapted to effect a great saving in the department of domestic labor for which they are designed; but, in the judgment of your committee, the "Monitor," exhibited by G. STEVENS, is entitled to the Premium as the best Washing Machine, and next in rank of merit we would place the "Little Giant."

F. B. LAMB exhibited a simple and ingeniously contrived Wash-Board, furnished with a self-adjusting rubber, easily operated with one hand, materially lightening the labor and doing effective work. We consider it very meritorious, and worthy of a

Premium.

CLOTHES WRINGERS.—A variety of these excellent household helps were found competing for popular favor. None of them, however, on the claim of originality or superiority, are entitled to a Premium, though we consider the "Eureka," exhibited by M. E. TRAVER & BRO., worthy of honorable mention.

CLAWSON & JOHNSON exhibited a Churn of Eastern invention but California manufacture. The churn was repeatedly tested while on exhibition, and operated so satisfactorily that we cannot hesitate in awarding to it the

Premium.

J. & W. C. SALMON exhibited a Churn, which we consider very meritorious, and deserving honorable mention. Other Churns in the Exhibition may have had merits which were not apparent to the committee, and, as they were not pointed out by the parties interested, they are passed without mention.

The Great Sanitary Cheese Hoop, made by T. F. NEAGLE.—This immense hoop is not only calculated to inclose and support the weight of the 4,000-lb. mass, but is so constructed that it can be clamped to or removed from the cheese with facility, as it may be necessary to inclose it for turning or uncover it for exhibition. It serves a good purpose, and is creditable to the skill of the builder.

Mrs. A. McKEON exhibited a Bee Hive, which, it is claimed, combines improvements of much advantage to the health and security of the bees. The improvements consist mainly in the provision of a non-conduct-

ing straw lining and wire screens. It is thought worthy of honorable mention.

MESSRS. NEWMAN BROS. exhibited samples of Brushes of their own manufacture, equal to any imported and highly creditable to the skill and resources of this enterprising firm.

Premium.

F. B. LAMB exhibited a compact and convenient Coffee Roaster, designed to set over any furnace or stove fire, and to revolve slowly by a simple clock-work machinery attached.

T. B. HOTCHKISS—A Butter Worker, simple in construction, and apparently calculated to prove a useful auxiliary to the dairyman.

Mrs D. NORCROSS has in the Exhibition a Gimp Mill for applying the silk thread covering to gimp and tassel cords. The mill appears to operate perfectly, and furnishes the means of prosecuting a new branch of industry here.

Mrs. E. MORRIS exhibited an Instrument for folding Shirt Bosoms, which we consider deserving a

Premium.

C. NEUMANN—A Patent Lamp Burner, which is quite ingenious.

S. D. SIMMONS—An Egg and Cake Beater, which may be found serviceable to housekeepers.

Several articles which may be properly classed in this department are passed by the committee in the absence of any description or information regarding their origin or the merits claimed for them; and it may not be improper to suggest that exhibitors might find it much to their advantage to attach to their articles such description as would make their claims intelligible.

Class XXXVII.**Domestic Preparations—Pickles, Preserved Fruits, Cured Meats, &c.****COMMITTEE:**

S. B. GODDARD, C. R. BOWEN, G. D. WHITE.

Report:

The committee appointed for the examination and comparison of articles in the Fair, entered under Class XXXVII, beg leave to say that they have passed judgment on the articles submitted to their inspection, as follows:

Mrs. A. BUNNER exhibits one case Preserved Fruits in jars, to show merits of a glass preserving jar.

C. NEWMAN exhibits samples of a Patent Preserving Jar, which is in general use in the Eastern States, and which seems to be superior to others on exhibition. The proprietor informs us that a person can seal up one thousand of these jars in a day. It is the invention of the exhibitor, and merits a

Premium.

G. W. CHASE exhibits samples of California Horseradish, grated and prepared for family use, a good article.

C. B. HEFTER, a mammoth loaf of well baked Bread.

J. D. GODEN, twelve bottles Washing Fluid. Premium.

— & FISHER exhibit a remarkable fine sample of Corned Beef, which cannot be excelled in quality, though having no competition.

Premium.

MARDEN & FOLGER make a good display of Coffee in both the raw state and prepared for the trade and family use; also spices, ground and packed. On tasting their prepared coffee we feel justified in awarding it the

Premium.

C. W. BROOKS & Co. exhibit samples of Hawaiian Produce, in the shape of Kona Coffee, Rice, Pulu, Tapioca, &c. These articles are fine in their line, and the Pulu and Tapioca are well deserving of a

Premium.

Mrs. MAXWELL, two jars of Pickles.

P. B. COMINS, one case Sauce.

THORA FOSS, one box Mammoth Eggs. Premium.

A. MONTZUN, two jars Preserved Eggs. Premium.

H. W. BREWER, an assortment of Fruits of good quality, preserved in cans, also some Raspberry Shrub, which latter is entitled to a

Premium.

CUTTING & Co. exhibit a very fine and varied assortment of case goods, consisting in part of Pickles, tastefully packed in various sized jars; Jams and Jellies, hermetically sealed; Pie and Table Fruits and fresh Vegetables preserved in cans; Tomato Catsup; Worcestershire Sauce; Capers; Brandy Peaches, &c., &c., all of California manufacture. These goods are all of very superior quality, and the style of their labeling and packing seems far ahead of imported articles. Of this most important branch of our domestic manufactures we learn that the articles on exhibition are fair samples of what this firm is capable of supplying to the trade in any quantity, and that they give employment to about sixty hands in their manufactory, which is one of the largest of its kind in the United States, occupying as it does the extensive property and buildings, Nos. 21, 23, 25, 27, 29 & 31 Main Street. This branch of industry is of immense importance to the agricultural interests of the State, since this firm alone annually consumes many tons of fruit and vegetables. In view of the merit of these articles, and the means that they are of retaining in the State so much money which would otherwise go abroad, we recommend for Cutting & Co. the highest premium that it is in the power of the Society to bestow.

ZWICK & LOEVEN exhibit samples of Extract of Coffee, which is said to be very extensively used in some of the Eastern States, and to double the strength of coffee, as well as clearing it nicely at a small expense; the experiments exhibited before us were of so satisfactory a nature that we feel warranted in awarding it a Premium.

BRIGNARDELLO & MACHIAVELLO make a very fine display of Macaroni and Vermicelli, prepared, it would seem, in almost every form in which it is possible to present this favorite food of the Italian nation. The different grades of the article exhibited are of superior quality, and deserve a Premium.

D. GHIRADELLI's samples of Chocolate and Cocoa, in the various forms of their preparation, do them great credit, and these articles if not superior, must be equal, to any of foreign importation, and are considered by us worthy of a Premium.

W. K. DIETRICK exhibits Hams, Bacon, Lard, &c., of his own well known brand and quality; also samples of bacon from Hayward, of Victoria, V. I. The committee regret not to have seen a greater display of this kind of produce from the many in San Francisco alone who make the preparing of these meats a business. Those on exhibition by Mr. Dietrick, of his own brand, are of very superior quality, and well entitle him to a Premium.

J. R. NICKERSON, of Placer County, in addition to his large display of fresh and dried fruits, furnished some samples of finely cured bacon, meriting honorable mention.

SUGAR.—Although not entered upon the Catalogue of articles for our examination, it may not be improper for us to refer to the splendid exhibition of Sugars made by the SAN FRANCISCO AND PACIFIC REFINERY. The importance of this successful branch of manufacture is fully appreciated, and its products maintain a high reputation in our market, which could not be affected by any recommendation of this Committee; nevertheless, it seems proper that so important a feature of the Exhibition should at least be mentioned in this report. The long range of tables showing the samples of sugar in the raw state and in all the intermediate conditions up to the refined loaves tastefully (as the juveniles will all testify) and effectively arranged, show not only the progress and enterprise of the manufacturers, but their interest in the Industrial Exhibition, whose highest award is due to this Company.

Class XXXVIII.

Regalia and Military Goods.

COMMITTEE:

A. G. ABELL, CHAS. MAIN, ANDREW JACKSON.

Report:

Your committee, to whom was referred the examination of Regalia and Military Goods, &c., find that MR. NORCROSS presents the finest display of articles of domestic manufacture, coming under the above designa-

tion; and that for Gold and Silver Embroidery on Regalia and Military Goods, he should be awarded a Premium.

MR. T. R. JOHNSON exhibits a very handsome assortment of goods of a similar class, as also a very fine variety of imported military embroideries and other goods.

BLAKE & Co. exhibit the best Army and Navy Hats and Caps, of domestic manufacture, and we recommend the Premium for those articles be awarded to that firm. A fine display of imported military goods is also offered by these gentlemen.

MR. D. FENNELL exhibits a pair of ornamented Cavalry Holsters, which deserve honorable mention.

Your committee, although the articles of which they are about to speak do not appear exactly to come within their province, deem it not improper, as they are not mentioned elsewhere, and are found in one of the cases enumerated in this class, to call attention to the Gimps, Fringes, Chenilles, Silk Buttons, Tassels, Cords, and other articles of similar description, exhibited by MR. D. NORCROSS; and as the committee were afforded an opportunity to witness the manufacture of many of those articles, all of which are made here, they recommend that for them a Premium also be awarded to Mr. Norcross.

The committee also desire to notice a very beautiful banner, for the Grand Lodge of Masons in Oregon, which appears in Mr. Norcross' case, and which was painted by MR. FREDERICK NUTZ; and, if it is deemed proper for them to make such recommendation, as it appears to be the finest piece of that kind of work in the exhibition, they would suggest that the Premium for banner painting be awarded to Mr. Nutz.

All of which is respectfully submitted.

Class XXXIX.

Furs, Hats and Caps.

COMMITTEE:

C. T. BLAKE.

DAVID D. COLTON.

Report:

Although the exhibition of Furs was made chiefly by two contributors, it was altogether, the largest and finest ever offered at any Fair in the State. The Committee find after careful inspection, that ADOLPH MULLER, is entitled to the Premium for the largest and best assortment of elaborately dressed California Manufactured Furs.

J. C. MEYER & SON, are entitled to honorable mention, for a beautiful and rare assortment of Eastern Manufactured Furs. We deem it not improper to say, that in our opinion, no city in the world can show a finer assortment of rich Furs than were exhibited by these two houses, both of which, in the choice and well assorted display of goods made here, furnished evidence of ample capacity and resource in this line of business.

DR. BEHRENS exhibited a fine Tiger Skin Buggy Robe.

H. ASKER exhibited a Robe of Guanaco Skins made by Patagonia Indians.

A. J. DOOLITTLE, a very fine Fur Seal or Sea Otter Skin taken on the Northern California Coast.

In the Hat and Cap department there were but two contributors each of whom made a creditable exhibition of goods.

LE GAY & Co., exhibited a case of very fine Silk Hats which merit a Premium, although no competition was made in this line.

MRS. C. E. LANG exhibited Childrens' Fancy Caps of various patterns and styles displaying excellent taste, and needle work which should be rewarded with a Premium.

Class XL.

Men's and Boys' Clothing.

COMMITTEE:

J. L. BROOKS.
L. SCHWEINLY.

F. ELWELL.
C. BOYERS.

Report:

The goods exhibited in this department were stylish

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and well made. Each of the contributors offered some one or more articles specially meritorious, and your committee were disposed to award the premiums accordingly as follows:

To T. G. SANFORD, for the best fine Coat, Vest and Pantaloons.

To G. F. WALTER, for the best Business Coat.

To C. A. FLETCHER & Co., for the best Youth's Black Suit.

To JOSEPH & Co., for the best Boy's Clothing.

To M. BURKMAN, for the best Military Suit.

But if restricted by your rule to one award only, for Tailoring Work, then the Premium is due to T. G. SANFORD.

Your committee, however, consider the manufacture of Boy's Clothing a distinct branch of the Tailoring Business, and in their judgment a Premium should also be rewarded to JOSEPH & Co., for the Best Work in this line.

Class XL.**Fancy Work in Hair, Sea Moss, Leather, &c.**

COMMITTEE:

T. GROB.

JAS. LINEN.

Report:

Reference to the Catalogue will show that this class embraced a large number of contributions, many of them works of great beauty and excellence. While the labor and pains bestowed upon others seemed, scarcely compensated in the effect produced; the failure being due not so much to the lack of skill and taste in design and execution, as to the unfitness of the materials for the uses attempted. To enumerate all the articles in this department would extend our report unreasonably, and your Committee feel obliged to confine themselves almost entirely to the mention of those to which they deem the awards due. But we desire to say that in our examination, we have found the merits of many of the contributions so nearly equal that it has somewhat embarrassed us to decide which was entitled to the preference; and had the rules of the Exhibition allowed it, we would have been tempted to a more liberal distribution of premiums.

The Fancy Hair Work of several of the contributors was highly creditable in both design and execution. But we think the Premium is due to MRS. ANNA STEIN GRUENWALD, for the best Hair Boquet, (exhibited by R. Weber.)

Much taste was displayed in several of the Sea Moss Wreaths and Boquets. But in the judgement of your committee the Premium for the best piece of this work should be accorded to MRS. D. CONRAD.

MRS. S. ATKINSON, is entitled to the Premium for the best Fancy Leather Work Picture Frames, though other work in this line was scarcely less deserving.

A. LAWRENCE, (a blind boy), exhibited a variety of Bead Work Baskets, Vases &c., the ingenuity and beauty of which might have raised a doubt of their being the work of one deprived of sight. But the sceptical could be assured of the verity, as Master Lawrence was found almost every day at the Fair employed upon like work, and he is very properly entitled to a Premium.

The work of the pupils of the Blind Asylum, exhibited by MRS. CLARK, the principal, comprised many pretty and useful articles, showing a surprising proficiency and aptness very gratifying to all interested in the efforts made to lighten the lot of this unfortunate class of our fellow beings.

Other contributions in this department were highly deserving and your committee can only claim that in making the awards they have endeavored to act carefully and impartially without pretending to infallibility in matters of taste and judgment.

Class XLII.**Dress Making, Millinery, Fancy Goods.**SUB DIVISION—*Dress Cutting.*

COMMITTEE:

J. C. MITCHELL.

MRS. STREET.

Report:

The value of a simple and reliable system of Dress Cutting, which may be easily understood, and practiced by those who desire or are obliged, to cut garments for themselves and families of children, will be readily appreciated by most ladies and mothers. Your Committee appointed to examine the "Mathematical Model" for cutting ladies' and children's dresses, designed and exhibited by MRS MARGARET CURTIS of this city, find it so simple and excellent that it cannot fail to be of the greatest service to those requiring an infallible instructor, assistant and guide in the important art of domestic dress cutting. It is worthy of the highest recommendation and the award of a Premium.

MILLINERY.—In the Millinery line, there were but two exhibitors, M'DME. PAULINE VERDIER and MRS. M. A. BUTLER, each of whom presented an elegant assortment of articles, tastefully made up from choicest selections of rich fabrics. It is difficult to believe that any display could surpass that made by these ladies, in elegance of style and the artistic management of the delicate and showy materials.

S. ROSENBLAT exhibited an assortment of rich and beautiful laces and elegant fancy goods.

MRS. D. GLAVER exhibited a case of elegantly made Babies' Clothing.

MADAME TERME exhibited a variety of Fancy Costumes of various styles and periods.

MRS. GOUX exhibited Shawls, Dyed in several colors to show the style of recoloring goods, worn or discolored.

Class XLIII.**Plain and Fancy Needle-work.**

COMMITTEE:

MRS. JASON CLAPP,

MRS. JONA. KITTREDGE,

MRS. G. E. BLASDELL.

Report:

The great number, variety, and nearly equal merits of many of the articles in this department of the Exhibition, rendered the duty of examination and award both laborious and delicate; but, governed solely by a desire to do impartial justice to each competitor, we hope to be accredited with fair intention and conduct, however the accuracy of our judgment may be questioned. As appears by the published catalogue, there are upwards of 120 contributors in this department, each having from one to twenty pieces from examination, and many of them of high excellence; but we feel that only partial justice could be done to the larger number of competitors in any attempt to specially notice other than the articles to which the awards are made, and therefore omit the usual enumeration and mention.

The Premium for the best Worsted Crochet Work (a buggy robe) is due to Mrs. T. G. SANFORD.

MRS. W. S. CANAN, of Healdsburg—Premium for the best Needle-work Picture ("Scene in Venice.")

MRS. R. VELASCO—Premium for the best Worsted Work in Flowers.

MISS HELEN ADAMS—Premium for the best Chenille Embroidery.

MRS. JULIANA BAYERS, of Sacramento—Premium for the best Bead and Worsted Work, and for the best Netting.

MRS. M. H. PARKER—Premium for the best Crape Chenille Work.

MRS. SPENCER POOL—Premium for the best, combined, Plain and Ornamental Needle-work (under garments).

MRS. E. DENNY—Premium for the best Tatting.

MRS. DRUEY—Premium for an elegant Down Cape and Trimming.

MRS. H. HALL—Premium for the best Silk Embroidery.

MISS VON ROON—Premium for the best Crochet Bed Quilt.

MRS SOUTHER—Premium for the best Knit Bed Quilt.

MRS. S. J. HILL—Premium for the best Patch-work Quilt.

MRS. C. HARVEY—Premium for the best Plain Sewing (shirt and chemise).

MRS. H. S. LOVE—Premium for the best Cotton Embroidered Collar.

MRS. NANCY BARTON—Premium for a San Bonnet, of superior style and make.

MRS. M. ANTHONY—Premium for the best Lace Embroidery.

MISS E. MAFFRE—Premium for an elegantly wrought Hearth Rug.

SUB-DIVISION—Manufactured Tobacco.

COMMITTEE:

J. W. SCHAFER, T. A. HUENERT, CH. PAPPS,
J. PRING, J. MEDAUX.

Report:

Your committee for the examination of Manufactured Tobacco find a large and very creditable exhibition of samples, in almost every form of preparation known in the market, and with such evidence of proficiency in manufacture, and the evident adaptation of soil and climate, in many portions of our State, to the growth of the plant, there seems to be no reason why the importation of this commodity should not soon be materially curtailed, and the larger portion of the amount expended for the indulgence, retained for circulation at home. The exhibition in this line was made wholly by two contributors--viz: J. B. HAMMA and R. F. GELIEN.

J. B. HAMMA exhibited samples of various kinds of Snuff and Smoking Tobacco, and is awarded the Premium for the best Maccaboy Snuff and for the best "German" and "Killikinick" Smoking Tobacco.

R. F. GELIEN made a large exhibition of Snuff, Smoking and Chewing Tobacco, and your committee find him entitled to the award of Premium for the best French Rappee Snuff, and we also recommend that he receive a special Premium for his large and excellent exhibition of Chewing Tobacco, which was without competition.

Classes XLIV and XLV.

Curiosities and Miscellaneous.

COMMITTEE:

GEORGE J. HOBE, CHAS. STEADMAN.

Report:

Your committee for examination of the articles found enumerated in the two classes above designated, together with an additional list of late entries, not catalogued or examined in the proper departments, have made such inspection as was found practicable; but in many instances it was not possible to obtain sufficient information respecting the origin and claims of articles examined, and we cannot assume to report a judgment upon such cases. We would suggest that exhibitors might promote their interests and facilitate examinations by placing with their contributions some description or specification of their claims.

PROF. A. DE LEO DE LAGUNA exhibited a large and very interesting collection of ancient and modern coins, medals, etc. Almost every age and people must have been represented in the Professor's cabinet, and he is entitled to the highest credit for this interesting and valuable collection.

E. HERMAN exhibits a case of admirably prepared Birds (Stuffed), and as the best in this line entitled to a Premium.

E. LORQUIN—A finely prepared Eagle (stuffed).

ROBERT MAYERS also exhibited specimens of Stuffed Birds.

— COHEN exhibited an interesting collection of Native Butterflies.

W. GREGG, of Napa, contributed a pair of Buck Horns, very remarkable for the regular curve and perfect correspondence of each branch to the opposite one in every minute particular.

A. WHITMAN exhibits two pairs of Elk Horns, interlocked and inseparable—evidently fastened in some combat of the animals, who were thus bound together to walk side by side through life. The horns are uniform in size, and are twined so handsomely that without the portions of the two skulls, attached, they would appear like double antlers springing from one head.

COL. WARREN'S museum embraced a large collection of rare and curious articles, of great interest and value. Nearly every department of human industry and natural production was represented, and the Colonel is entitled to great credit for the industry and zeal with which he devotes himself to these interests.

O. FULLER exhibits a very handsome Aquarium, of octagon form, containing a large and beautifully formed sheet of coral.

G. E. CROWELL exhibits a Model House, of paper material; and nothing in the Fair furnished the juvenile class of visitors so much enjoyment and satisfaction as this perfectly furnished and embellished Toy House. All the proportions and appointments were complete, even to the bed-room tapers and the clothes pins; showing a degree of ingenuity and mechanical skill which merits a Premium.

S. C. HIGGINS also exhibits a Model Rustic House, of paper material, not so complete in appearance as that before mentioned, but as the work of a lad of 15 years, is remarkably good, and deserving honorable mention.

MRS. NATHANIEL HOLLAND'S Skating Gallery, it is not necessary for your committee to say, is an elegant and pleasing parlor toy, which has been admired by thousands, old and young, while it has contributed largely to our patriotic charities. We are not informed as to the claims of originality, but consider Mrs. Holland deserving a Premium for enterprise and skill displayed in producing this effective and handsome piece of scenic mechanism.

MEAD & SON exhibit Children's Rocking Horses, and are, as we learn, the only manufacturers of this article here.

MASTER H. CARLETON—Sample of Perfumery, of fine quality. Master Carleton, though scarcely in his teens, is said to be quite a proficient chemist and metallurgist. The sample of perfumery would certainly detract nothing from the claims of proficiency, and if placed in competition would have stood well for preference.

R. F. BROOKS—A case of Hair Dyes and Perfumery, handsomely put up, and no doubt equal to imported articles in the same line.

MRS. SICKEL exhibits Hair-Dyeing Tinctures.

MRS. CHAPMAN also exhibits Hair-Coloring Preparations, which is considered by your committee preferable to any in competition, as it purports to be a vegetable preparation, which produces its coloring effects without the aid of mineral ingredients.

DR. R. BECKFORD exhibits a preparation—"Golden Eye Water"—which, it is claimed, is an almost infallible cure for sore and weak eyes. Having no occasion to test the claims experimentally, your committee took the exhibitor's reference to a number of citizens of character, and their testimony as to its good effects was unqualified, and we do not doubt that it is a valuable composition for the purposes intended.

C. NEWMAN exhibits a very ingeniously contrived Box for the collection of railway fares. If any such contrivance will answer the purpose sought, this seems calculated to do so, and its ingenuity merits a Premium.

CHURCH & CLARK exhibit a Frame showing the styles of their pieces for Fire-works. The designs were very handsome and the arrangement tasteful. The compli-

FOURTH INDUSTRIAL EXHIBITION

ferred to cane-seat or other description of common chairs.

MRS. S. BAKER—A pair of very handsome Buckskin Ladies' Riding Gloves.

J. BARMAN—A handsome lot of Terra Cotta Rustic Hanging Baskets and Brackets, deserving honorable mention.

E. DUDGEON—A number of Dudgeon's well-known Hydraulic Jaeks; also a Hydraulic Punch. The merits of these useful appliances are so widely known that it is unnecessary to remark upon them here.

CARROLL & LEONARD, of Folsom, exhibited a model Key Bridge, which appeared highly meritorious.

OTTO & WEICHART exhibited a liquid preparation, "Carboneum," said to possess the property of restoring the original qualities to steel which has been overheated or burnt. Samples of cast steel bar were exhibited, showing the grain and appearance of the steel in the original condition, burnt and restored; and it would seem to be a preparation of great value if its effects can be relied on to equal those upon the samples shown.

TEUBNER & HOPFMAN exhibited several very fine Silver Plate Framed Show Cases, which merit a special Premium.

E. MORRIS exhibited Shirts, Wristbands and Collars of domestic manufacture, and superior style and quality. Premium.

SUB-DIVISION—Confectionery and Candy.

COMMITTEE:
F. W. SMITH. R. A. ALBRECHT. AUG. HESS.

Report:

The undersigned, appointed to examine and report upon the samples of Confectionery and Candy Work on exhibition have inspected the samples in competition, and find the First Premium due to H. BEIRE for a finely ornamented Fruit Cake.

EHRENPFORT & Co. are entitled to a Premium for an excellent variety of Candies.

If it is consistent with the rules of the Exhibition we would also recommend that a Special Premium be awarded to the "Occidental" Hotel for the fine Confectionery Temple exhibited.

SUB-DIVISION—Laundry Work.

COMMITTEE:
A. DREYFOOS. F. LORD. THOMAS J. PELL.

Report:

Appointed a Committee for examination of the Laundry Work on exhibition, we have carefully inspected the lots in competition, all of which must be accounted work of the best class, and highly creditable to the competitors; but after impartial comparison we find the award of Premium due to L. LELAND & Co., "Occidental" Laundry.

SUB-DIVISION—Manufactured Tobacco.

COMMITTEE:
J. W. SCHAFER, T. A. HUENERT, CH. PAPPS,
J. PRING, J. MEDAUX.

Report:

Your committee for the examination of Manufactured Tobacco find a large and very creditable exhibition of samples, in almost every form of preparation known in the market, and with such evidence of proficency in manufacture, and the evident adaptation of soil and climate, in many portions of our State, to the growth of the plant, there seems to be no reason why the importation of this commodity should not soon be materially curtailed, and the larger portion of the amount expended for the indulgence, retained for circulation at home. The exhibition in this line was made wholly by two contributors—viz: J. B. HAMMA and R. F. GELIEN.

J. B. HAMMA exhibited samples of various kinds of Snuff and Smoking Tobacco, and is awarded the Premium for the best Maccaboy Snuff and for the best "German" and "Killikinniek" Smoking Tobacco.

R. F. GELIEN made a large exhibition of Snuff, Smok-

ing and Chewing Tobacco, and your committee find him entitled to the award of Premium for the best French Rappee Snuff, and we also recommend that he receive a special Premium for his large and excellent exhibition of Chewing Tobacco, which was without competition.

Special Reports.

COMMITTEE:
W. B. EWER, G. F. DEETKEN.

Cordage.

TUBBS & Co., Agents for the San Francisco Cordage Company, exhibit, from their manufactory, on the Potrero, fifteen coils of Cordage, assorted samples, comprising grades of various descriptions, ranging from the lightest hay rope to the heaviest hawsers, and inferior in no quality of good cordage to the best manufactured abroad. It may even be questioned whether any imported cordage of the kind can be found in this market equal to the samples exhibited by Messrs. Tubbs & Co. The manufacture of Manilla cordage was one of the earliest important manufacturing interests established on this coast. The San Francisco Cordage Company commenced their business in 1856, and have successfully prosecuted it since with a constantly increasing amount of production. They are now engaged in still further and greatly enlarging the capacity of their works, to meet the requirements of a constantly increasing demand. This Company possesses two important advantages over Eastern manufactures for this market—viz: a closer proximity to the sources of supply of the raw material, and the advantage of manufacturing it into such sizes of cordage as the market may at the moment require. The consumption of hemp by this company is now about 1,200 tons per annum, laid down in this port directly from Manilla at a cost of from 9@10 cents per pound—the manufactured article selling usually at 13@14 cents. The highest Premium is due for the cordage manufacture of this Company.

Powder.

The CALIFORNIA POWDER COMPANY exhibit a sample lot of Powder manufactured at their Powder Works in Santa Cruz, which, in perfection of manufacture and in strength, is believed to be equal to any powder offered for sale in this market. This Company has spared no pains or expense in the erection of their works, and it is believed that in excellence of machinery and completeness of equipments that these works are not exceeded, even in the Atlantic States. They have entered upon this enterprise—the first of its kind on the Pacific coast of America—for the purpose of producing here, in California, an article of the first importance to our leading industry, as well as to the safety of the State, which is so effectually isolated from its Eastern sisters that in case of foreign war we should, without this important speciality of manufacture, be almost at the mercy of a foreign power of any considerable naval strength. Aside from these important considerations, there are other and weighty reasons which must readily suggest themselves, why California should not be dependent on distant sources for the supplies of an article of commercial necessity, when we have in our midst the chief part of its component parts as cheaply accessible as they can be found in the Atlantic States or in foreign lands. The establishment of this business has necessarily involved a large outlay of capital, which is greatly increased for the necessities of providing against the dangers consequent upon the nature of the manufacture. With the view of insuring safety in this particular, the works have been located in an extensive and level valley, where the many different buildings needed have been widely separated, yet all connected by substantial tramways and cars. The water-power requisite for driving the machinery has also been conducted to this sequestered spot at great expense. The Company manufactures seven grades of powder—one of blasting powder and six of sporting powder.

Premium.

Wire Rope Machinery and Wire Manufacturers.

MESSRS. HALLIDIE & Co. exhibited a Wire Rope Machine, of a new and improved character, and samples of

Wire Rope, round and flat, and also California drawn wire, the manufactures all being the product of their wire rope factory in this city. The great importance which attaches to this class of manufacture on the Pacific coast, has induced your committee to visit the manufactory, where the samples exhibited were produced, for the purpose of collecting such facts as might be of general interest in this new branch of California industry.

The wire works of Messrs. Hallidie & Co. are located at North Beach, San Francisco, where the proprietors are prepared for the execution of any orders for the manufacture of wire ropes, round and flat, for mining, bridging, agricultural, and other engineering purposes. In order to give the reader an insight into the mode of preparing the wire and manufacturing wire ropes, we will show him the different processes through which the iron rod has to go before it is used for hoisting the heavy mineral from our mines, spanning our rivers, developing our resources, or facilitating our commercial intercourse. Before the heavy coils of round iron are fit to be reduced or drawn into wire for wire rope and other manufacture, they have to be annealed, to soften the metal. For this purpose about $1\frac{1}{2}$ tons of iron coil are introduced into an upright cylinder, of thick boiler iron, about $3\frac{1}{2}$ feet in diameter and 6 feet high, which cylinder is surrounded by a mantle of mason-work, leaving a space of a few inches between it and the cylinder to allow the heat to play around it. A flue passes through the center of the cylinder, to allow a uniform heating of the iron coil from the inside. The fire is applied underneath, passes through the cylinder and space between the cylinder and mason-work, heating up the coil, which is placed within. The access of air from the heated coil is entirely shut off by a cover firmly luted into the cylinder top with clay. The time of heating up the coil is about five hours, after which the furnace doors and flues are closed tightly, to retain the heat for a considerable time. After about nineteen hours of cooling, the iron coil is taken out and dipped into a weak bath of sulphuric acid, which removes the slight film of oxyd, and leaves a clean surface of iron. It is then washed off in sweet water. The wire, after this operation, is passed through a wash of some gelatinous substance, which facilitates the subsequent drawing by furnishing a clear, smooth surface to the wire. The iron coil, after being carefully dried, is now drawn through a die one size smaller than the previous one, being taken up on a drum, in the shape of a car-wheel, on an upright axle, flange downward, which in revolving draws the wire through the die (made of the hardest white cast iron), which reduces its size one number. This process is continued from one size die to the next smaller until the desired degree of fineness is reached. The works are capable of reducing the size of any wire, of any malleable metal, down to No. 28. The wire so drawn to the required size is now ready to be made into rope, after being dried in a hot-air room as fast as possible, to avoid oxydation. As the machine for making the rope would defy description without an accompanying isometrical sketch, it will only be necessary to mention that it simply lays the strand around a central cord or core of hemp or cotton, without twisting the wire, avoiding thereby the destruction of its fibre. The machines, and the work done by them, were more fully described in the "Mining and Scientific Press" of Sept. 29, 1864. In conclusion, we have to state that the works are capable of making wire rope, of any desired length and strength, of steel, as well as of iron or copper. The advantages of wire over hemp rope, especially for mining purposes, are various and important. It is much more durable; the same strength of rope represents only about 65 per cent. in weight of that made from hemp; it does not shrink in wet weather: is not injuriously affected by the heat of Summer; does not increase in weight in mines by the absorption of water; is as readily and securely spliced as hemp rope, and is quite as pliable when made to correspond in strength. Your committee are pleased to learn that this rope is being rapidly introduced into the mines, where it is becoming very popular by reason of the above mentioned advantages which it possesses over hemp rope for many purposes. The establishment for its manufacture is regarded by your committee as one of great importance to

the State; and we are assured by the proprietors that its efficiency and capacity for work will be increased in a ratio to correspond with the growing demand for its production. The especial attention of miners is invited to the economy and increased safety of this class of material, which is beginning to form an important item in the expense of our deep mining operations.

Premium.

In connection with the above, it affords your committee much pleasure to call especial attention to the very extensive display of goods manufactured from wire, from the factory of H. T. GRAVES, No. 412 Clay street, San Francisco, known as the "California Wire Works." The articles exhibited comprise many articles which are useful, and, in fact, indispensable, to the miner, the miller, the farmer, and others. Among them we noticed particularly very heavy, strong screens, for screening ores of different kinds, coal, etc.; brass and steel wire screens, of various fineness, for quartz batteries; riddles for foundrymen's use; sieves, of various kinds; wire screens, for doors and windows, for excluding flies and mosquitoes, at the same time affording perfect ventilation; a great variety of wire frames, for the purpose of displaying all manner of clothing, hats, caps and fancy goods; wire fenders and wire guards, as a protection to children from fire in open grates, as well as a safeguard against accident by fire. Some of these were highly ornamental in their design and workmanship. We also noticed very superior wire cloth for millers' reels and screens, also for rice cleaning, locomotive spark-catchers, threshing machine and fanning mill sieves, etc.; also several large and highly finished bird cages, rat traps, of enormous size and of various patterns; wire frames, for supporting carnations and other garden plants, etc. Among the articles exhibited by Mr. Graves, the Summer-house is worthy of very especial mention. It was octagonal in form, twelve feet in diameter, and sixteen feet high to the crown or apex of the dome. The columns at each corner were formed of two spiral wires, crossing each other at regular intervals, thus forming diamond shaped openings. The panels were of what is termed "crimped work," the wires crossing each other in diamond form, and at each crossing being "crimped," or indented, making the whole very firm and stiff. The whole structure, weighing only about 450 pounds, and made in sections, can be easily and safely transported to any distance. With the Summer-house were wire chairs, proof against all weathers, light, strong, beautifully made, and very durable. As an exhibition of California manufactures, we consider that Mr. Graves is entitled to much credit, as every article on exhibition (and the display was a large one) was, without exception, wholly of California manufacture. We therefore recommend the award of a

Premium.

On Sugars.

COMMITTEE:

J. H. CHURCHILL, A. M.

W. B. EWER.

The following is the report presented:—

The subscribers having been appointed on the part of the San Francisco Mechanics' Institute, to examine the products exhibited, and the process of manufacture adopted by the San Francisco & Pacific Sugar Company, have attended to that duty and beg to report as follows:—

We found on exhibition at the late Fair of the Institute a lot of Sugars, unrefined, refined, and in loaves, with various materials, arranged to exhibit to the visitors, the changes which the raw material is compelled to undergo in its progress from its reception in the original packages, until it is fully prepared for the market. The various grades of refined, loaf, crystallized, crushed and powdered sugars give unmistakeable evidence that the Company have arrived at a high state of perfection in their manufacture. They produce sugars which now compete successfully in the markets of the East. Their syrups are held at a much higher figure than those from Boston. The display attracted much attention, and assures us that California and the Pacific Coast has at length been made quite independent of other markets, for the indispensable articles of sugars and syrups.

Your committee were supplied with great facilities for inspections, the works of the Company which cover two 100-vara lots.

The external works comprise three cooperage shops—two warehouses for cooperage materials, where forty hands are employed on piecework, at earnings averaging \$3 per day—carpenter's and blacksmith's shops, the latter furnishing work for five hands—gas works, where gas is made from coal—bone retorts, yielding animal black, of which the stock in use is 420 tons, with a loss of 25 to 30 per cent. per annum: these retorts are connected, when required, with the gas main: the bones vary in cost from \$8 to \$16, according to their solidity—a detached house for the five boilers in use—four pumps, working together, and drawing water, from independent sources of supply, in strata varying from 125 to 270 feet below the surface. Two thousand gallons is the daily supply for condensing purposes, this being almost the whole demand; much is reused after cooling in two shallow reservoirs holding 150,000 gallons.

The construction of these reservoirs is cheap enough to be noteworthy—clay is floated over a bed of sand and the deposit, at a thickness of half an inch, is sufficiently retentive, and is easily repaired in the same way.

The main buildings consist of the melting house, the white sugar house and the yellow sugar house. The first is traversed by a roadway, by which the raw sugars enter the works. Sixty-five thousand pounds from all parts of the world, are weighed in daily. Grinding on an iron plate, with rollers worked under water, is the first operation. The sugar is here dissolved in distilled water: a small quantity of sand at the bottom and the scum and floating material at top, are alone what is separated here. The sugar, thus melted at the lowest possible heat, is drawn off in the cellar below, and thence pumped without further change to the seventh story of the same building—this stage consumes one hour. There it is first distributed into vats, where precipitants are used—some of these are imported. Raw steam is used for heating: and sprinklers kept at hand to control any foaming, precipitation is not waited for, but the syrup, still high colored, is run down to the floor below, to filters, consisting of bags six feet deep, into which it is distributed, by flowing it over iron plates pierced with the brass pipes which form the mouths of the bags; 480 yards of filtering surface are thus arranged in cubes, four feet square and eight feet deep: a ton and a half of mud is removed daily. The waste contains still enough color and sugar to be attractive to distillers. This waste is discharged through a pipe, in which its motion is quickened, when necessary, by a steam jet. It is afterwards pressed, to leave as little as may be for the distiller. The dissolved sugar is then passed lower to the important stage in which the animal black, from the bones burnt outside, forms the active agent. This is employed to remove not only the color, but the taste and smell which distinguish raw sugars. This it does by being retained, in contact, in deep circular iron vessels: 12 tons of charcoal with 12 tons of raw sugar, on the average thus keep each other's company for twelve hours. Afterwards water is passed through for 72 hours in the same vessels.

The restoration of the charcoal—of which this is the beginning—forms a separate process. The sugar passes, meanwhile, through pipes to the sorting room, where samples are made to exhibit themselves in glass vessels, and the contents of the corresponding pipes are run into vats below, or again forced to the top of the animal black filters, when too discolored for mixing. From these vats the requisite proportions for any grade are taken, by pumps, to the vacuum pans, situated in the story over the melting room. Here they are boiled, under a pressure maintained below that of the atmosphere, by a continuous discharge of water downwards through a condenser, which is connected directly with the pans. The heat is wholly supplied by steam, admitted to the casing and the worms in the inside. The utmost cleanliness is necessarily preserved throughout; daily washing of the vats, pumps, filters and faucets is resorted to to obviate any fermentation. Centrifugal wringers are used for the filtering bags.

The syrup in the vacuum pan is reduced to a consistency suitable for crystallizing, and then run into large

vats, from which it is conveyed, still hot, in steam-cased pipes. It next appears in moulds, of conical form, such as may be supposed to cover ordinary white sugar loaves. In these it is allowed gradually to crystallize, when the syrup left is allowed to drain off. These loaves are dried in a stove, at a temperature of 150 degrees, and are broken down in crushing mills, in an upper story, to which they are hoisted, thence descending, through riddles, to the barrels and boxes, from which the grocers present them to their customers.

The process by which the syrup is completely extracted from the loaves is of interest, as being one transferred from the laboratory to the working room. Water, saturated with crystallized sugar, is passed through the moulds, and in flowing out carries with it the remnants of the syrup, while it is incapable of carrying off the solid sugar. The principle involved has found similar applications in other manufactures.

The process of restoring the charcoal, which occupies so large a place in this manufacture, consists in heating it to a red heat, cooling off, re-washing, and returning it to the filters. These operations have to be conducted continuously, fresh supplies have to be prepared, and the whole is arranged to time with the regular flow of the syrup from the melting house to the roof, and thence again to the ground floor—measures almost automatic in their management. Saccharometers and gauge pipes furnish the control which maintains this harmony. Economy is further assisted by the compactness of the machinery for pumping, by the care with which heated surfaces are protected from radiation, by double glazing in windows, by the use of small vertical retorts arranged in large groups, and by the recovery of the waste heat from the cooling animal black, which is employed to heat some part of the large quantity of water evaporated every day.

As a provision against accidental delays, four expensive centrifugal strainers, with detached engines, are maintained ready for any emergency. How urgent these may be will be seen, when it is known that a careless hand neglecting to shut a door in one of the heated rooms, may delay work for days—valuable will appear the care bestowed on covering the steam pipes, when their measure is reckoned in miles. Many of the operations have to be checked at various times of the day. Such is the ability required in the management of our Pioneer Sugar Refinery.

This manufacture is doubtless important. By it the consumers of thirty tons of sugar per day are enabled to eat or drink a well-cleansed and wholesome article. On the other hand, we see the labor of 225 men—the energies of 25 tons of Mount Diablo coal, transmitted through nine steam engines—and the skill which can direct these to effecting such various operations, with concert of purpose and regularity of result—all these applied to removing 3,000 pounds of mud and other matters, which formed no part of the original cane juice.

Premium.

Glass.

COMMITTEE:

J. H. CHURCHILL, A. M.,

W. B. EWER.

Your committee report as follows:

The exhibition of this manufacture made by the PACIFIC GLASS WORKS COMPANY at the Fair of the Mechanics' Institute and at the works of the Company, situated at the Potrero, have been carefully examined by us with varying satisfaction. The first may be deemed a very successful *expose* of what is possible with capital and skill. The enterprise which so fully developed the various capabilities of their manufacture is very commendable, and one which should weigh with importers. We noticed, with no little satisfaction, the development of an idea suggested by one of us, not many months since, as to the value of the glass manufactured here for chemical ware. Retorts were exhibited which might well be substituted for those imported. The Company, at the time of the Exhibition, had been in active operation about fourteen months. They manufacture a great variety of green, blue, and black bottles, earboys, fruit jars, etc., of any desired shape, with increasing facilities for every description of druggists' ware. Tinted lamp chimneys were shown, such as were long since successfully introduced by Defries & Co. in London. Telegraph insulators, and other kinds of blown and pressed glass, are offered at a

cost below that of imported ware. The advantage of moulds bearing the trade-marks of our home manufacturers is an important one, when the fragile character of the product is considered and the delay incurred in obtaining shipments from the East.

The growing industries of our State are a wide field for the future success of this Company, so enterprising in parveying for their wants. This success on their part would be even more assured than it is, if they could rely on native supplies of the few manufactured articles and tools which they require. Every allowance must be made on this account, while the perseverance which is to overcome them is a feature which reflects great credit on the present programme of the Company. Your committee also personally inspected the works of the Company at the Potrero. They found them only partially in operation, as preparations were being made for the regular repairs of the principal furnaces. They regretted to observe evidences of the want of personal superintendence, which is as manifestly a necessity of the business of a public company as of that of a private firm. The raw materials of this manufacture, when confined to the class of goods furnished by this Company, are not numerous, and California has abundant—probably very superior—supplies, and some within easy reach. Those which have been obtained seem to have been applied with very little regard to their capabilities; yet there is scarcely a manufacture in which an exact knowledge of the constituents of the materials daily introduced into the works and pots is more required to ensure the production of any desired grade, or even to maintain the uniformity so essential to commanding the market. Men outside of glassworks will appreciate this necessity, if we compare it to that required in the management of fluxes. The proper application of the materials is based on the same principles—the control of the result is more easily ensured.

In certain respects an extravagance is exhibited, which exceeds that of a quarter of a century ago in other works, or which could only be warranted by the manufacture of the most expensive glass. Part of this is doubtless the usual accompaniment of early business; but it seems to have been exaggerated in this case by adherence to an error, which has been the bane of so much misapplied labor here and elsewhere—viz: that a successful “practical man”—meaning thereby one who has acquired experience by continued application to details or detached parts of a business—is the right man in the right place to organise a new work in all its branches; to search out and select materials, and manipulate them in successive operations; to design constructions, and unite bricks and mortar; to superintend workmen; to arrange the supplies within the limits of finances, to be obtained with as little certainty as assessments; and, finally, to furnish the product with the regularity, which is a necessity to meet a paying demand. The idea is still current that the only antithesis to this is to employ a man who has had no experience in anything. This is called a theoretical man.

We venture to suggest that the true remedy is an organization based upon the capabilities and requirements of the whole of the details, and the employment of labor skilled in each division, solely in its own branch. The Company is well aware of the disadvantages under which they have heretofore labored, and are taking active measures to remedy the evils; hence we assume that no apology is necessary for thus speaking of a subject which is still dividing the opinion of shareholders in this Company, one of such promise and of such certain capabilities it thoroughly worked.

Premium.

Trusses.

MR. A. KEHLER exhibits a show case of Trusses, Braces, Supporters and Bandages for weak ankles, crooked legs, club-foot, and surgical purposes. The articles are fully equal to any in the market, and are all of California make.

Premium.

FREDERICK KESMODEL exhibited a Truss of a peculiar construction, designed by himself. This truss is made from a cast of the rupture, which is first taken and the truss subsequently formed, so that its surface shall correspond exactly with the part to be supported. This peculiarity of construction, as well as perfection of finish, is deemed worthy of special mention.

Telegraph Instruments and Apparatus.

THE CALIFORNIA STATE TELEGRAPH COMPANY exhibit a complete set of Telegraph Instruments and apparatus, manufactured by Mr. William Lundberg, of this city. These instruments consist of a Morse Relay, a Morse Sounder, a Morse Manipulating Key, a Cut-Off and Ground-Wire Switches. An Electro-Magnetic Coil Instrument was also exhibited, manufactured by the same party as above, which by its effects added not a little to the interest and attraction at the Pavilion. The instruments manufactured by Mr. Lundberg, particularly his Relay Instruments have been used by the California State Telegraph Company for the last three years, by whose manager and operators they are pronounced equal to the best and superior to many, in efficiency, that are manufactured in the Eastern States. The great difficulty experienced by manufacturers of Telegraphic Instruments, in producing an efficient Relay Magnet, lies in the selection of the proper material, together with the necessary process of annealing the Iron, which forms the Magnet and also in the perfect construction of the adjusting gear. Mr. Lundberg appears, by well directed efforts to have successfully overcome these drawbacks, and is now able to produce a Relay Magnet, equal, if not superior to anything of the kind which has ever been produced. For this excellency of manufacture, as well as superior finish of manufacture, your committee consider the instruments manufactured by Mr. Lundberg as eminently worthy of the highest award for such manufacture.

CATALOGUE OF ARTICLES

Exhibited at the Fourth Industrial Exhibition of the Mechanics' Institute of the City of San Francisco.

A

- Mrs. S. Atkinson, San Francisco: six leather-work Picture Frames.
 L. Atkinson, San Francisco: one Model Locomotive Grate.
 Miss Ames, San Francisco: one card of Lace Specimens.
 C. L. Abbotts, Santa Cruz: one frame of Shell and Moss Work
 J. Q. Adams, San Francisco: three Water Color and Pencil Drawings.
 Dr. W. O. Ayer, San Francisco: two cases of Native Borax.
 D. E. Appleton & Co., San Francisco: one case Imported Cutlery.
 W. Allen, San Francisco: three pieces of Scroll Sawing.
 Mrs. M. Anthony, San Francisco: one piece Lace Embroidery.
 Fortunato Arriola, San Francisco: four Oil Paintings.
 Dr. Adams, San Francisco: one case Dentistry.
 Mrs. Adams: one frame Zephyr Worsted Work.
 Miss D., Alvarado: one Worsted Worked Picture; one Sofa Cushion.
 Aitken & Co., Sacramento: one California Marble Table.
 Mrs. E. Avery: three Quilts.
 J. D. Arthur & Son, San Francisco: one Combined Reaper and Mower; one Model "Giant" Reaper; four cast-steel Plows (imported); two pairs Elk Horns.
 W. Aram, San Jose: two bottles White Wine.
 H. Asker, San Francisco: one Robe of Guanaco Skins.
 Miss Helen Adams, San Francisco: two pieces Chenille Embroidery.
 E. A. Attwood: one Self-regulating Windmill.
 C. Andrews, San Francisco: one Wardrobe Bedstead; one Secretary; one Center Table; one Window Cornice; one lot of Carved Pieces; one Piano Stool, one Marble Slab and Brackets.
 Armes & Dallam, San Francisco: one lot of Pails, Tubs, Keelers, etc.
 Alisky & Woodbury, Tuolumne county: sample lot of Plumbago.

B

- H. W. Brewer, Alameda county: samples of Preserved Fruits, in tin and glass, Raspberry Shrub, etc.

- Louis Brader, San Francisco: a Worsted Worked Picture —Washington—by Miss Kate Brader.
 Robert Bragg, San Francisco: an Elevating Gang Plank.
 S. M. Brooks, San Francisco: fourteen Oil Paintings and Paintings and Plaster Bust.
 Norton Bush, San Francisco: six Oil Paintings.
 G. Burrows, San Francisco: an Air Pump and Telescope (imported).
 Bryant & Stranahan, San Francisco: a piece of Wood Carving.
 Miss Nellie Brown, San Francisco: a Crochet Tidy.
 C. S. Bradshaw, San Francisco: Mineralogical Specimens and Fire-proof Paint
 Mrs. M. A. Butler, San Francisco: a case of Millinery Articles.
 J. B. Baux & Guiod, San Francisco: an Amalgamator and Separator, and Two-Stamp Battery.
 Mrs. Mary Burckes, San Francisco: a Knit Quilt.
 C. Burkhardt, San Francisco: a case of Boots.
 J. M. Beth, San Francisco: a Reducer and Amalgamator.
 H. C. Bateman, San Francisco: specimens of Book Binding, and an improved Music Folio.
 Mrs. Brickwell, San Francisco: a Bed Quilt.
 Mrs. A. Burrage, San Francisco: a Pencil Drawing, and set of Toy Furniture.
 W. S. Baxter, San Francisco: two Crayon Sketches.
 Dr. E. Belle, San Francisco: an Anatomical Specimen, and Apparatus for Extracting Teeth.
 Mrs. R. Bertrand, San Francisco: a Lady's Skirt.
 J. Bach, San Francisco: a case of Sporting Articles, and Gunsmith's Work.
 J. Brodie, San Francisco: an Improved Lining for the Freiberg Amalgamating Barrel.
 Bartling & Kimball, San Francisco: specimens of Book Binding—Ledger, Bibles, and other volumes.
 E. Belle, San Francisco: nine Architectural and Mechanical Drawings.
 Mrs. C. A. Barnes, Alameda: a Glass, taken from one of the Boston tea ships, and an Ancient Tea Pot.
 A. P. Brayton, San Francisco: a "Peacemaker" Cooking Stove, and a Field Coal Burner (imported).
 C. S. Brian, San Francisco: two pieces of Needle-work.
 J. E. Burke, San Francisco: a Crayon Drawing, and Map.
 J. M. Ball, San Francisco: specimens of Worm-perforated Timber.

- S. Brannan, San Antonio: fifty-three pieces of Terra Cotta Architectural Ornaments, and samples of Stone Ware.
- H. Burgess, San Francisco: one specimen of Penmanship; three Pencil Drawings, and Instruments for sharpening Crayons and Pencils.
- G. H. Burgess, San Francisco: five Water Color Pictures.
- Miss L. C. Baldwin, Marysville: one case of Hair Jewelry.
- Brignardello & Machiavello, San Francisco: samples of Macaroni and Vermicelli.
- M. C. Brydges, San Francisco: four Chimney Tops; two Ventilators, and Dampers.
- Robert Blair, San Francisco: a Model Ship.
- Mrs. H. L. Bessemer, San Francisco: case of Cosmetics, Hair Oil, etc.
- E. C. Brooks, San Francisco: a Patent Buggy Wagon.
- W. R. Brown, San Francisco: three Covered Buggies.
- Brignardello Bros., San Francisco: ten pieces of Italian Statuary.
- L. Bacon, San Francisco: an Allegorical Monument, in Plaster.
- Joseph Bien, San Francisco: a Combination Lock.
- J. Burrell, Santa Clara: two bottles of California Wine.
- A. Buswell, San Francisco: sample lot of Russia Leather, and Morocco Portfolios, Pocket-books, etc.
- R. F. Brooks: samples of Pomatum, Hair Dyes, Perfumery, etc.
- E. Benoist: samples of Crude and Refined Petroleum Oil, from Mariposa county.
- J. B. Barker: a Model Earth Excavator.
- W. Bausman, San Francisco: two of the First Pamphlets published in California.
- Mrs. Bernhardt, San Francisco: a frame Needle-work.
- E. Benoit: one Daylight Reflector.
- J. D. Brown, San Francisco: a Model "Plunger" Boat.
- E. I. Barra, San Francisco: a small piece of Pilgrim Rock, and samples of Blackberry Cordial.
- G. Bower, San Francisco: Model Tire Upsetter and Machine.
- Dr. Beers & Son, San Francisco: specimens of Dental Work.
- L. Breidenstein, San Francisco: Morocco Jewelry Caskets, and Fancy Confectionery Boxes.
- Miss B. Brown, San Francisco: a piece of Needle-work.
- Felix Barbaries, Benicia: a Model Feathering Paddle Wheel, and two bottles of Wine—vintage 1863.
- Mrs. H. S. Brown, San Francisco: a piece of Needle-work.
- Bath & Morrison, San Francisco: a Butcher Cart.
- S. F. Blasdell, San Francisco: one Roper's Caloric Engine; four Rotary Pumps (imported).
- Mrs. J. Bayers, Sacramento: a large variety of Worsted, Bead, Knit, and other Needle-work.
- J. Blum: one specimen of Penmanship.
- Beebe & Lynde, Sacramento: one "Challenge" Washing Machine.
- Mrs. Bunnell, San Francisco: Self-sealing Fruit Jars, and samples of Preserved Fruit.
- Mrs. N. Bennett, San Francisco: five pieces Fancy Needle-work.
- Mrs. C. A. Barnes, Alameda: one Child's Dress; two bottles Currant Wine.
- Mrs. H. W. Brown, Petaluma: one herbarium of California Plants and Flowers.
- Barton Bros., San Francisco: ten sacks and three sample boxes of Salt.
- E. F. Bunnell, San Francisco: one glass case of Dentistry.
- Miss Bell, San Francisco: two Water Color Pictures.
- Mrs. M. L. Bewley: one Embroidered Shawl Pin.
- Byrnc & Castree: one case Salutaris Bitters.
- W. H. Baxter, San Francisco: a Patent Churn.
- E. Bosqui & Co., San Francisco: specimens of Book Binding, and samples of Book Binding Stock.
- Blake & Co., San Francisco: two cases of Military Caps, and other Military Goods.
- D. R. Beckford, San Francisco: samples of Golden Eye Water.
- Bishop & Chalmers, San Francisco: a Scotch Newspaper of 1707.
- Dr. Behrens, San Francisco: a Tiger-skin Buggy Robe.
- W. Berney, San Francisco: a Patent Saw-filing Machine.
- J. Brannan, San Jose: two bottles White Wine.
- Thomas Beale, San Francisco: an Oil Portrait, by Daniel of Liverpool.
- Mrs. E. Brown, Sacramento: an Oil Painting.
- E. M. Brackett, San Francisco: a Crayon Sketch.
- C. W. Brooks & Co., San Francisco: samples of Sandwich Island Produce—Kona Coffee, Sugar, Rice, Pulu, Tapioca, Tobacco and Segars.
- F. S. Butler, San Francisco: three specimens of Penmanship.
- Mrs. Brown: a Crayon Fruit Picture.
- Mrs. A. Blaiser, El Dorado county: a Crochet Collar.
- W. P. Blake, San Francisco: Blake's (Connecticut) Rock Breaker.
- Mrs. S. Baker, San Francisco: a pair of Ladies' Buckskin Riding Gloves.
- Miss Batchelder, San Francisco: a Silk Wreath, in frame.
- Isaac Bird, San Jose: two boxes of Apples, box of Tobacco, bag of Potatoes, and bale of Hay (donation to Sanitary Fund).
- J. Barman, San Francisco: Terra Cotta Hanging Baskets, Brackets, and Flower Pots.
- P. M. Blair, San Francisco: Mammoth Pictorial Newspaper of 1841.
- J. F. Brown, San Francisco: two framed Parlor Ornaments.
- Mrs. Bell, San Francisco: two pieces Crochet Work.
- Mrs. N. Barton, San Francisco: a Child's Sun Bonnet.
- H. Behre, San Francisco: an Ornamented Fruit Cake.
- B. N. Bugby, Folsom: samples of California Wine and Raisins.

C

- Mrs. Alex. Coffin, San Francisco: a framed Shell and Sea Moss Bouquet.
- J. H. H. Campbell, San Francisco: samples of a Patent Grain and Flour Sack.
- M. M. Cook, San Francisco: three sections of Fire Hose; Leather Blunderbuss, and samples of Leather.
- Church & Clark, San Francisco: samples of Pieces for Fire-works.
- Clark & Perkins, San Francisco: Wool Samples, Fleeces, Pressed Wool, and a case of Kerosene and its Product.
- Mrs. Coffin, San Francisco: three Tidies; Infant's Robe, etc.
- Mrs. Cummings, San Francisco: a Worsted Work Picture.
- Clawson & Johnson, San Francisco: a Patent Churn.
- M. Curtis, San Francisco: an Express Wagon.
- R. P. Clement, San Francisco: three pieces of Sea Moss, and Shell Work.
- Mrs. Chapman, San Francisco: a case of Hair Dye.
- Mrs. Chapman, Punta Reyes: a "Log Cabin" Quilt.
- L. Cady, Virginia City: Quartz and Lava Specimens.
- Ronald Cook, Benicia: a Galvanized Iron Life Boat.
- C. Coyle, San Francisco: a Four-oared Race Gig (built at Victoria, V. I.)

FOURTH INDUSTRIAL EXHIBITION

- Mrs. W. S. Canan, Healdsburg: a Needle-work Picture.
 Mrs. Christie, San Francisco: five Tidies.
 Chy Lung & Co., San Francisco: a case of Chinese Fancy Goods:
 E. I. Cummings: assorted specimens of Fruit.
 Miles Cardiff, San Francisco: five Old Oil Paintings.
 Dr. Calvert, San Francisco: samples of Artificial Teeth, and Corundum Wheels, of his own manufacture.
 J. H. Culver, San Francisco: a specimen of Copper Ore.
 A. Conrad, San Francisco: a Writing Desk and Chair; Shaving Stand, and Book Case.
 Victor Coppe, San Francisco: a Child's Bedstead; Stand for Glasses; Walking Cane; Looking Glass; Bouquet Holder, and Oval Frame.
 J. H. Churchill, San Francisco: sample of Stearic Acid, by new process; Bitumen in Glass, and Instrument for Testing Coal Oil.
 G. W. Chase: sample of Prepared Horse Radish.
 T. Carlos, San Francisco: three Mexican Saddles, and Riding Furniture.
 A. Campos, San Francisco: a Mexican Saddle.
 Mrs. G. E. Growell, San Francisco: a Model Toy House and Furniture.
 Miss M. Chadburn, San Francisco: a piece of Black Silk Lace.
 — Cohen, San Francisco: a case of California Butterflies.
 R. F. Clark, San Francisco: a Pencil Drawing.
 J. R. Clark, San Francisco: five Weather Vanes.
 Miss A. J. Colombert, San Jose: a Chair Tidy.
 Mrs. Cleary, San Francisco: specimens of Preserved Flowers.
 City College (pupil): a Pencil Drawing.
 Mrs. W. M. Copeland, San Francisco: a vase of Wax Flowers.
 D. Collins, San Francisco: one Engraving.
 Conroy & O'Connor, San Francisco: a patent Chain Pulley Purchase, and assortment of Smith's Tools, Cast Steel Bells, &c., (imported.)
 Mrs. P. B. Clark, San Francisco: a vase of Shell Flowers and case of Moss Work.
 Mrs. M. L. Curtis, San Francisco: fifteen pieces Furniture Embroidery.
 H. L. Chamberlin, San Francisco: a chrystalized Water Cooler.
 Mrs. M. Curtis, San Francisco: a mathematical model for Dress Cutting.
 J. H. Camp, San Francisco: a goblet made from the wood of the Charter Oak.
 Cameron, Whittier & Co., San Francisco: three large Mirrors, silvered here.
 M. Chinmark, San Francisco: a model of Sliding Ship-joiners' Bevel.
 J. H. Camp, San Francisco: a piece of Embroidery.
 Cutting & Co., San Francisco: Preserved Fruits in tin and glass, Jams, Jellies, Pickles, Cider Sauces, Ketchups, etc.
 G. Congdon, San Francisco: specimens of Gold and Silver Ores.
 G. Cavan, San Francisco: Banner of the Ship Joiners' Association.
 Miss M. Comfort, San Francisco: two vases of Wax Flowers.
 P. B. Comins, San Francisco: a samples of "Comins Sauce."
 Mrs. Ramona Canalizo, San Francisco: a vase of Wax Fruit.
 Mrs. W. B. Corliss, San Francisco: three Pencil Drawings.
 California State Telegraph Company: fifteen Telegraphic Instruments and apparatus (home manufactured).
 Master H. Carleton, San Francisco: a bottle of Perfumery.
- C. H. Coffin, San Francisco: an Architectural Drawing.
 Carroll & Leonard, Folsom: a model Patent Adjustable Key Bridge.

D

- Mrs. H. T. Dam, San Francisco: one Bible Cushion.
 A. G. Dexter, San Francisco: a lot of Improved Lever Door Gongs.
 John Dean, Sacramento: one Wine Press.
 Peter Dorn, San Francisco: one pair Riding Boots.
 Mrs. Doane, San Francisco: one silk Bed Quilt.
 Mrs. A. DeYoung, San Francisco: one Crayon Sketch.
 Miss C. DeClair, San Francisco: a Tapestry Picture (Washington).
 Mrs. Doolittle, San Francisco: a vase of Woolen Flowers.
 W. K. Dietrich, San Francisco: samples of Lard, Hams, Bacon, &c.
 W. W. Dunn, San Francisco: a Rock Drilling Machine.
 F. W. Dennis, San Francisco: a Water Color Picture.
 Thos. Dolliver, San Francisco: a case of Ladies' and Children's Gaiters and Shoes.
 J. Hayward, Victoria, V. I.: a lot of Hams and Bacon.
 Mrs. C. DeYoung, San Francisco: a Crayon Sketch.
 Mrs. DeCamp, San Francisco: a glass case of Shells and Sea Weeds.
 W. G. Doolittle, San Francisco: three specimens of Penmanship.
 J. H. Dewey, San Francisco: a patent Churn.
 L. Downing & Sons, San Francisco: two Concord Buggies, (imported).
 Geo. S. Dickey, San Francisco: a case of Monsell's Salt.
 E. Dubourque, San Francisco: three specimens of Sign Painting.
 Drytown Quartz Company: specimens of rich gold Quartz.
 Mrs. Dyer, San Francisco: a model Water Wheel.
 J. B. Duquemey, San Francisco: specimens of Wood Carving.
 J. Drouilhat, San Francisco: two Billiard Tables.
 Mrs. Drury, San Francisco: a Down Cape and Trimmings.
 J. L. Durkee, San Francisco: a Fireman's Cap (made in New York).
 A. Dreyfoos, San Francisco: specimens of Card Writing and Penmanship.
 E. Devany, San Francisco: a Pencil Drawing.
 John Daniel, San Francisco: a Marble Head Stone.
 Deaf, Dumb and Blind Asylum: a case of Bead and Crochet (the work of the pupils).
 C. Durler, San Francisco: two framed Sketches and Pencil Drawings.
 Mrs. E. Denny, San Francisco: samples of Tatting.
 W. D. Dyer, San Francisco: fifteen Photographs.
 Henry Dutton, San Francisco: three Water Color Pictures.
 A. DeLeo de Laguna, a Cabinet of Coins and Medals.
 Devoe, Dinsmore & Co.: a Model Sugar Mill.
 Dewey & Co., San Francisco: Six Volumes of the Mining and Scientific Press.
 Mrs. Drury, San Francisco: a model Dress Cutting Chart.
 F. Despoix, Stockton: fourteen varieties of Grapes and four varieties of Green Beans.
 G. J. Denny, San Francisco: eleven Oil Paintings.
 W. W. Dunn, San Francisco: two Cylindrical Rubber Springs.
 D. Dodge, San Francisco: two of Tapley's (N. Y.) Self Feeding Hand Sawing Machines.
 A. David, San Francisco: a patent Steam, Vapor and Warm Water Bath Tub.
 Robert F. Delano, San Francisco: an Inlaid Box.

M. C. Dupuy, San Francisco: a French House Model.
 Donahue, Ryan & Secor, San Francisco: a model of the Monitor "Camanche."
 A. J. Doolittle, San Francisco: a California Fur Seal Skin.
 E. Dudgeon, San Francisco: one of Dudgeon's (N. Y.) Hydraulic Punches, and four of same maker's Jacks.
 C. A. Doe, San Francisco: a model Harvesting Machine (Eastern invention).
 B. Dougherty, San Francisco: two home made Rattan Baskets.
 John Dolbeer, San Francisco: two Instruments for counting and indicating sums of figures.
 H. F. Day, San Francisco: an Automaton Clock.
 Mrs. T. A. Doolittle, San Francisco: a Monochromatic Picture.
 Miss Racine Davis, San Francisco: a Pencil Drawing.

E

M. G. Elmore, San Francisco: specimens of Copper Ore.
 G. W. Edwards, San Francisco: four Oil Paintings.
 L. E. Eckel, San Francisco: a piece of Embroidery.
 Mrs. Ellmaker, San Francisco: two pieces of Coral; one Oil Painting; five pieces of Moss Work.
 Easton Bros.: two French Tables and four Cabinet Writing Desks.
 W. F. Ensign, San Francisco: a Monitor Bark Safe (imported).
 Ehrenfport & Co., San Francisco: two cases of Confectionary and Candies.
 Eureka Soap Company, San Francisco: sixteen boxes of Soap.
 Eastman & Keith, San Francisco: specimens of Wood Engraving.
 Moses Ellis & Co., agents San Lorenzo Paper Mill: samples of Wrapping Paper and Straw Board.
 Engleberry & Wagner, San Francisco: a Pyramid Cake.
 A. M. Eells, San Francisco: a Child's Carriage.
 R. S. Eells, San Francisco: an Oil Portrait, by Carpenter of New York.
 A. Edonart, San Francisco: sixteen Photographs.
 Chas. Elliott, San Francisco: a Rotary Steam and Water Engine Pump and Meter.
 H. Enhler, San Francisco: a Rosewood Bureau.
 Miss R. Eisman, San Francisco: a Lamp Mat.
 R. S. Eells, San Francisco: a model Percussion Quartz Mill.
 Mrs. E. Ewing, San Francisco: a silk Bedspread and specimens of Tapa and Grass Cloth from the Sandwich Islands.
 Evatt, San Francisco: a Photograph.

F

W. D. Farrand, San Francisco: an Amalgamating Machine.
 Mrs. H. Foster, San Francisco: a knit Bed-spread; frame of Sea Mosses; view of the "Cliff House."
 Miss Felkner, San Francisco: a box of Crochet Work.
 Mrs. Field, Santa Cruz: a shell What-not.
 P. Fella, San Francisco: a framed piece of Embellished Scripture Quotations.
 J. F. Fugazi, Marysville: samples of Hair Oil and Perfumery.
 J. H. Folkers, San Francisco: a case of imported Surgical and Dental Instruments.
 O. Fuller, San Francisco: an Octagon Iron-framed Aquarium.
 F. Francis, San Francisco: a Fancy Work Box, California wood.

Mrs. Flora Foss, San Francisco: a box of remarkably large Eggs.
 Mrs. Ferguson, San Francisco: two leather-work Picture Frames; two pieces of Shell Work; vase of Paper Flowers; an Alum Basket, and vase of Rosin Flowers.
 A. Fenkhausen, San Francisco: samples of Bitters and Extracts.
 D. Feunnell, San Francisco: a pair of Cavalry Holsters.
 Mrs. Field, San Francisco: a framed Wax Flower Picce.
 Fargo & Babcock, San Francisco: a Shingle Machine, by Stoddart, of New York.
 B. H. Freeman & Co., San Francisco: a Rosewood Vase.
 Miss Figel, San Francisco: a piece of Tapestry Work.
 Miss G. Fletcher, San Francisco: two Water Colored Photographs.
 A. J. Frick, San Francisco: a Patent Packing and Filling Machine.
 C. A. Fletcher, San Francisco: five suits Boys' Clothing.
 M. E. Fitz-Gibbon, San Francisco: specimens of Prepared and Unprepared Wharf Piles, and Asphaltum Side-Walks.
 Wm. Free, San Francisco: three sections of Suction Hose, and pair of Suction Spanners.
 Mrs. Felt, San Francisco: a Silk Quilt and Silk Cushion.
 C. A. Fuhr, San Francisco: a set of Parlor Furniture and a Turkish Chair.
 Mark Forney, San Jose: thirty-eight varieties of Pears and nine varieties of Grapes.
 — Fish, San Francisco: samples of Fish's Hair Restorative.
 Louneux Francis, San Francisco: an Oil Painting and Crayon Drawing.
 B. Fauchery, San Francisco: a Turbine Wheel, Crocodile Quartz Crusher, and a Quartz Grinder.
 C. F. Fisher, San Francisco: specimens of Hair Jewelry.
 Mrs. S. J. Field, San Francisco: a Carriage Afghan.
 Mrs. Fanbohm, San Francisco: a Silk Dress and Cape.

G

G. W. Green, San Francisco: a specimen of Penmanship.
 Anna Gharky, Santa Cruz: a Shell What-Not.
 Mrs. Gender, San Francisco: an Agricultural Wreath, and piece of Chenille.
 Miss Gabbs, San Francisco: a piece of Fancy Hair Work and Artificial Flowers.
 Mrs. Griswold, San Francisco: a "Basket" Bed Quilt.
 W. Gregg, Napa: A pair of Curious Buck Horns.
 Gov. Gibbs, Oregon: a specimen of Iron Ore.
 Mme. Goux, San Francisco: a Shawl, re-dyed in several colors.
 S. Genot, San Francisco: specimens of Seal and Letter-Stamp Engraving.
 P. A. Gavin, San Francisco: a specimen of Penmanship.
 Mrs. D. Glavc, San Francisco: a case of Baby Clothing.
 Thomas Golden, San Francisco: a specimen of Graining.
 Mrs. Grethen, San Francisco: a case of Laundry Work.
 W. V. Gray, San Francisco: two Water Colored Pictures.
 J. D. Godcns, San Francisco: twelve bottles Washing Fluid.
 Mrs. M. Goode, San Francisco: a Bed Quilt, and three Tidies.
 Mrs. Granniss, San Francisco: a Crayon Drawing.
 W. C. Greaves, Vallejo: an Inlaid Chest, of California wood.
 Goodwin & Co., San Francisco: seven pieces Dining Room Furniture; nineteen Parlor do., and nine Bed-room do.
 D. C. M. Goodsell, San Francisco: eleven models for Iron-plated Gunboats, Rams, Floating Batteries, etc.

- G. W. Guion, San Francisco: an assortment of Mechanics' Tools (imported).
- Gate's Garden, San Francisco: Aquaria, Wardian Cases, Rustic Baskets, Plants, etc.
- G. F. M. Glover, San Francisco: specimens of Decorative Paper Cutting.
- R. G. Gelien, San Francisco: samples of California manufactured Smoking and Chewing Tobacco and Snuff.
- H. T. Graves, San Francisco: a large octagon Wire Summer House, Wire Screens, Sieves, Clothing Frames, Fenders, Cages, Traps, etc.
- H. Gerke, San Francisco: three bottles Native Wine.
- W. B. Gleason, San Francisco: specimens of Wood Carving—a Pigeon, Quail, Hawk's Fcather, and a Fly cut in oak, maple and sycamore.
- Mrs. H. M. Gibson, San Francisco: two Crayon Portraits (one—Thos. Starr King—donated to Sanitary Fund).
- Mrs. M. Griswold, San Francisco: a "Daisy" Lamp Mat.
- Miss M. A. Gage, San Francisco: an Oriental Table.
- Greaves & Smith, San Francisco: a small Anchor, made of copper from the "Union" mine.
- Mrs. S. D. Gilmore, San Francisco: two Tidies.
- Gallagher & Weed, San Francisco: samples of Brass Composition Sheathing Nails.
- Mrs. E. Gelien, San Francisco: four picces of Bead and Needle Work.
- R. Gibbons, San Francisco: an Improved Model Cannon.
- John Guanasco, San Francisco: specimen of Composition Stone Flooring.
- J. G. Gimmy, San Francisco: specimen of new method of Tin Roofing.
- Mrs. Gage, San Francisco: three bottles Enamel Bloom.
- W. T. Garratt, San Francisco: an assortment of Brass Founders' Work, Water and Steam Cocks, Guages, Globe Valves, Gongs, Whistles, Hose Couplings, Pipes, etc., etc.
- A. Giorgianni & Co., San Francisco: samples of Salt from Alameda.
- D. Ghirardelli & Co., San Francisco: samples of Prepared Coffee, Chocolate, and various Cocoa Preparations.
- A. H. Gunnison, Mare Island: an Architectural Drawing.
- Miss Josephine Geis, San Francisco: a Tapestry Picture.
- H**
- Mrs. S. J. Hill, San Francisco: a French Calico Quilt.
- George Hughes, San Francisco: seven Drawings.
- H. L. Hopkins, San Francisco: an Amalgamating Machine.
- C. H. Harrison, San Francisco: four Eccentric Wrecking Pumps, and one Centrifugal Andrews' (New York) Pump and Enginc.
- H. R. Huie, Alameda: an Improved Gang-Plow.
- E. C. Hall, San Francisco: samples of re-cut Files.
- E. P. Heald, San Francisco: three specimens of Penmanship.
- H. Hobson, San Francisco: eight Pencil Drawings.
- Jerome Harris, San Francisco: a Miniature Model Brig.
- Mrs. Hodgon, San Francisco: a Shell Basket.
- J. M. Horner, San Jose: two Washing Machines.
- L. Holloway, Gilroy: a Gang-Plow.
- Mrs. G. M. DeHylton, San Francisco: a framed Hair Wreath.
- L. Holloway, Gilroy: a Patent Horse Collar (to work without hames), and a Gang-Plow.
- H. Hinkle, San Francisco: specimens of Map Drawing.
- Master S. C. Higgins, San Francisco: one Model Rustic House; three Grecian Paintings; two Needle-work Pic-
tures; a Meehanical Drawing; a Moss Wreath, and two pieces of Needle-work.
- A. Hunter, San Francisco: a Grain Separator, and a Ma-chine for Concentrating, Amalgamating and Separating Ores.
- August Humburg, San Francisco: nine pieces Dining Room Furniture; two Gothic Chairs; one Reclining Chair; one Piano Stool, and one Wardrobe.
- H. Herzer, San Francisco: a sample lot of Crucibles, Muffles, and Scorifiers.
- H. G. Hofer, San Francisco: one Gilt-framed Mirror.
- R. L. Harris, San Francisco: a Railroad Turn-out—model.
- Mrs. H. Hull, San Francisco: a case of Silk Embroidery.
- W. W. Hanscom, San Francisco: a Photograph—"Engines of the Karsage"—and a Rock-Crushing Machine.
- Mrs. W. W. Hanscom, San Francisco: specimens of Feather Flowers and Pictures.
- W. Holt, San Francisco: two School Desks; Camp Stool; Settee, and Clothes Frames.
- John Hcald, San Francisco: a case of Dentistry.
- E. Herman, San Francisco: a case of Stuffed Birds.
- C. H. Hain, San Francisco: an Electric Clock, running with a regulator on Montgomery street; a Turning Lathe; a pair of Pruning Shears, and a pair of Sheep-Marking Tongs.
- G. H. Hidden, Sacramento: two bales of Hops.
- M. P. Holmes, San Francisco: a Covered Buggy.
- Hobbs, Gilmore & Co., San Francisco: samples of Native Wine and Brandies.
- J. B. Hamma, San Francisco: samples of California Snuff and Smoking Tobacco.
- G. B. Hitchcock & Co., San Francisco: five sets of Blank Books.
- H. Horstmann, San Francisco: one set of Parlor Furni-ture; two Tables; Piano Stool, and Looking-Glass.
- A. S. Hallidie & Co., San Francisco: an Improved Wire Rope Machine; samples of Round and Flat Wire Rope, for stays, shrouds, ferry and mining uses, fencing strand, sash cord, etc.; samples of home manufactured Iron, Steel, Copper and Brass Wire.
- Hucks & Lambert, San Francisco: samples of Axe Grease, Turpentine, Pitch and Rosin.
- B. A. Henricksen, San Francisco: four Patent Chimney Tops.
- Hopkins & Johnson, San Francisco: a two-stamp Quartz Prospecting Battery.
- J. Hendy, San Francisco: a Gang Circular Saw.
- Hinckley & Co., San Francisco: a Circular Gang Saw Mill.
- D. E. Hough, Alameda: one hundred and thirteen va-rieties of Pears; six do. of Apples; two do. of Plums; one do. of Quince, and one Japanese Plum.
- H. C. Hoyt, San Francisco: a Skkeleton Boat, for pair of skulls.
- M. E. Hughes, San Francisco: two Billiard Tables (one of them donated to the Sanitary Fund).
- Mrs. E. J. Hall, San Francisco: two bars of Copper and bar of Galena, from Smelting Process, and a Conden-ser for Smelting Furnace.
- Mrs. J. B. Harmstead, San Francisco: nine pieces of framed Wax Work, and nine pieces under glass.
- A. J. Haight, San Francisco; a case of Gold Pens.
- Mrs. M. C. Hopkinson, San Francisco: a Newspaper of 1789.
- C. C. Hayes, San Francisco: a Wreath of Worsted Flow-ers.
- M. H. Huntington, Redwood City: sample bunch of Sawed Shingles.
- Mrs. Hilton, San Francisco: one Rag Ottoman.
- Mrs. C. Harvey, San Francisco: a case of Plain Needle-work.
- Mrs. Hawley, San Francisco: a case of Fancy Bead and Needlework.

- Hopps & Kanary, San Francisco: specimen of Glass Sign Painting.
- C. & W. Hutchinson, San Francisco: samples of Carved Block Letters.
- Haraszthy & Giovanni, Sonoma: samples of Sonoma Wines and Brandies.
- W. P. Harrison, San Francisco: a Working Card Press, and specimens of Plaiu and Colored Printing.
- Mrs. J. C. Homer, San Francisco: a basket of Wax Fruit, and vase of Wax Flowers.
- Miss L. Holland, San Francisco: four Worsted Vase Mats.
- Hodge & Wood, San Francisco: three Copying Presses.
- J. S. Hittell, San Francisco: two bottles of Red Anaheim Wine, 1861.
- Thomas Hill, San Francisco: fourteen Oil Paintings.
- Hoadley & Co.: samples of Wines and Bitters.
- Richard Haskin, Dutch Flat: two Mining Hose Couplings.
- Haynes & Lawton, San Francisco: two cases assorted samples of China, Glass and Plated Warcs, Statuettes, Vases, etc.
- Joel Halstead, San Francisco: a Cider and Wine Mill, with Press Combined.
- S. Hill, Agent, San Francisco: six "Florence" Sewing Machines.
- T. B. Hotchkiss, San Francisco: a Patent Butter Worker.
- Hawley & Co., San Francisco: a "Buckeye" Mowing Machine, and seven Plows (imported).
- C. B. Hefter, San Francisco: a mammoth loaf of Bread.
- Hansbrow & Redding, Sacramento: a 14-horse power Hydrostatic Engine, and a Model.
- Thomas Hansbrow, Sacramento: six "Challenge" Prize Pumps; one Model do.
- Mrs. Nathaniel Holland, San Francisco: a Skating Pond.
- Mrs. W. O. Henderson, San Francisco: a piece of Crochet Work.
- Hepburn & Peterson, San Francisco: a Reducing and Amalgamating Machine, and a Separator.
- Hayward & Coleman, San Francisco: one hundred and ten imported Bohemian Lamps, and eight California "Quartz Mill" Lanterns.
- Miss Clara J. Hunt, San Francisco: a card of Crochet Work.
- Haskell & Co., San Francisco: an assorted lot of Japan and China Teas, and Roasted and Ground Coffee.
- Mrs. M. B. Harrington, San Francisco: one Pastile Picture, in cone frame; one do. in gilt frame.
- Mrs. E. R. Hawley, San Francisco: a Rice and Shell Basket, and Bed Quilt.
- E. F. Hough, Martinez: a Model Self-Regulating Windmill.
- Master B. E. Henricksen, San Francisco: two Pencil Drawings.

I and J

- E. C. Johnston, San Francisco: a specimen bar of Copper, from the North Point Metallurgical Works.
- S. Jones, San Francisco: a Fire-proof Safe.
- Mrs. Joice, San Francisco: a Wreath, in frame.
- Jarvis Jewett, San Francisco: three Artificial Legs (Eastern manufacture).
- J. Joseph & Co., San Francisco: three Figures and Suits of Boys' Clothing.
- J. H. Johnston, San Francisco: samples of Ale and Porter.
- T. Rogers Johnson, San Francisco: two cases Regalia and Military Goods.
- A. C. Isaacs, San Francisco: specimens of Shell Work.
- E. B. Johnson, San Francisco: an Amalgamating Machine ("Novelty").
- Mrs. B. G. St. John, San Francisco: three Water Colored Pictures.
- Johnston & Reay, San Francisco: two Rotary Pumps, and a Chimney Top.
- E. Jump, San Francisco: a Lithographic Print.
- Jones, Wool and Sutherland, San Francisco: one Gilt Table; three pieces of Sculpture; two Oil Paintings.
- A. P. Johnston, San Francisco: thirty-nine framed Photographs.
- W. Innes, Mokelumne Hill: specimens of Gold and Silver Ores, from Blue Mountain District, Calaveras county.
- S. Jacob, San Fránisco: a worsted work Picture.
- N. T. Johnson, San Francisco: six Water Colored Paintings; one Oil Painting; two Pencil Drawings; one India Ink Drawing.
- D. Jacks, Monterey: samples of White Sand, for glass making.
- J. T. Jones, San Francisco: a Yatch Model.
- Joseph Bros., San Francisco: a case of Gold Buckles, and Silver Statuetts.
- W. H. Jessup, San Francisco: samples of "Eureka" home-manufactured Matches.
- Jackson & Johnston, Sacramento: five bags of Sacramento river Cotton, and one Cotton Gin.
- J. S. Jarvis, Stockton: five home-manufactured Rush-bottomed Chairs, and two Barley Forks.
- Mrs. Jackson, San Francisco: onc Photograph.

K

- A. Kœhler, San Francisco: a case of Trusses, Shoulder and Spinal Braces, Surgical Bandages, etc.
- Krusc & Euler, San Francisco: a large block of Copper Ore, from Union Mine, Del Norte county (donated to the Sanitary Fund).
- Kohler & Frohling, San Francisco: twenty-six bottles of Native Wines and Brandies.
- G. H. Krause, Knight's Ferry: three bottles Native Wine.
- W. B. J. Kenney, San Francisco: a case of Gold Pens.
- Knapp, Burrell & Co., San Francisco: two cans Oregon Turpentine.
- A. Kohler, San Francisco: one Parlor Organ, and case of Musical Instruments.
- C. C. Kcene, San Francisco: Flutinas, Accordeons, and Banjo.
- G. P. Kimball & Co., San Francisco: one Family Carriage: one Traveling Buggy, yatch body; one Park Phæton, and a Model Truck.
- Kreitz & Casbie, San Francisco: an assorted lot of Horse Collars.
- Dr. Kellogg, San Francisco: specimens of Electrotyping.
- M. Kracker, San Francisco: two speicmens of Penmanship.
- Jno. Kittredge, San Francisco: two Burglar-proof "Monitor" Safes.
- O. Kalschmidt, San Francisco: eight Water Colored Paintings; two India Ink Drawings; three Paintings on Ivory, and ten Oil Portraits and Paintings.
- W. Kock, San Francisco: one Oil Painting.
- Mrs. W. C. Kibbe, San Francisco: a Sofa Cushion.
- Mrs. Krause, San Francisco: an Embroidery Rug.
- T. Kendall, San Francisco: two Patent Gold Pens, and an Improved Sluice Model.
- Kimball & Thayer, San Francisco: a Schooner Model.
- G. P. Kimball, San Francisco: an Improved Clothes Pin.
- Knapp, Burrell & Co., San Francisco: samples of Raisins (from M. R. Miller, Solano county).
- Mrs. W. H. Knight, San Francisco: a Crochet Carriage Afghan.
- J. W. Knox, San Francisco: an Amalgamating Machine.

FOURTH INDUSTRIAL EXHIBITION

George Kleeks, San Francisco: Fancy Brass Castings.
M. Keller, San Francisco: twelve bottles assorted Native Wines.

L

Mrs. Livingston, Redwood City: a leather-work Frame.
Mrs. Lincoln, San Francisco: an Ancient Deed of Real Estate.
H. Linden, Alameda: a Sheaf of Neapold Barley
Master A. Lawrence, San Francisco: a case of Fancy Bead Work.
Le Gay & Co., San Francisco: a case of Silk Hats.
Mrs. Lovegrove, San Francisco: What-not and Picture Frames.
Mrs. Lang, San Francisco: a case of Childrens' Caps.
Miss M. Lekens, San Francisco: specimens of Gilding.
R. Liddle & Co., San Francisco: a case of Guns, Pistols, and Sporting Articles.
Mrs. Levy, San Francisco: two vases Feather Flowers.
F. Leaphart, San Francisco: three boxes Chemical Olive Soap.
Mrs. G. W. Lull, Sacramento: an Agricultural Wreath.
F. B. Lamb, San Francisco: Locks, and Window Blind Hinge; a Sheep-shearing Machine; a Coffee Roaster (imported), and a Wash Board (California invention).
James Longshore, San Francisco: eight Leather Trunks, and seven Valises.
Lawrence & Houseworth, San Francisco: a case of Philosophical, Mathematical, and Optical Instruments (imported), and Stereoscopic Cases of California and Foreign Views.
Mrs. M. Lewis, San Francisco: an Embroidered Chemise, and Knit Quilt.
P. Liesenfeldt, San Francisco: two Billiard Tables.
Locke & Montague, San Francisco: a Cooking Stove (imported), and assortment of Kitchen Utensils, of home manufacture.
Pascal Loomis, San Francisco: specimens of Wood Engraving.
E. F. Lorquin, San Francisco: specimens of Stuffed Birds, and case of Insects.
Miss M. Long, San Francisco: four Bead Baskets.
Mrs. R. Lewis, San Francisco: four pieces of Hair Work.
M. D. Lasswell, San Francisco: one Single Action Pump; one Windmill Pump.
G. B. LeClerc, San Francisco: a Model Smelting Furnace; Bar of Copper, and a Model Amalgamator.
Oscar Lewis, San Francisco: a specimen of Model Making (Wheeler & Randall Amalgamator).
W. Ludeman, San Francisco: a case of Meerschaum Pipes (imported).
G. A. Lloyd, San Francisco: a Model Arastra and Amalgamator.
R. Lauvella, San Francisco: a Model Ship.
Mrs. H. S. Love, San Francisco: samples of Needle-work.
Lansezur & Habert, San Francisco: exhibit of Greenhouse Plants.
A. Lind, San Francisco: a Model Water-wheel.
P. Lamb, San Francisco: a Damp Regulator for Steam Boilers.
Mrs. Lathrop, San Francisco: two Tidies.

M

F. T. McAuliff, San Francisco: two specimens of Polishing, and Imitation of Rosewood.
Mrs. Matthieu, San Francisco: three Water Color Sketches.
W. G. Moody, San Francisco: specimens of Copper Ore, from the Narcosari District, Mexico.

Main & Winchester, San Francisco: Saddles, Harness, Whips, Carriage and Horse Furniture, of home manufacture.
A. Muller, San Francisco: an assortment of California manufactured Furs.
S. Miller, San Francisco: an Improved Feathering Paddle.
Mrs. McPherson, San Francisco: a Child's Walking Dress.
Robert Mayers, San Francisco: specimens of Stuffed Birds, Papier Mache, etc.
A. Mendoza, San Francisco: a Patent-fastening Gold Buckle.
D. Mojica, San Francisco: specimens of Veneering, and a Guitar.
B. Manchester, San Francisco: a Shell Frame.
Miss Ida May, San Francisco: a Sofa Cushion.
Meeker, James & Co., San Francisco: a Patent Spoke Borer (imported).
Mason's Brewery, San Francisco: samples of Ale and Porter.
J. G. H. Meyer, San Francisco: specimens of Billiard Balls, and Fancy Ivory Work.
S. Marion, San Francisco: two Full-Rigged Model Ships.
E. Mandeville, San Francisco: one 40-inch extra Smith's Bellows.
H. Miller, San Francisco: samples of Double Leather Belting; three sections Fire Hose; samples of Kip and Imitation French Calf Skin.
Charles Morrell, San Francisco: two Banjos.
Mardwell & Otto: a Foot Lathe, Spiral Springs, and Bell (imported).
H. Manneck & Co., San Francisco: samples of Paper and Wood Boxes, for Millinery, Dry Goods, Stationery and Office use.
A. C. McDougall, Monterey: two Shell Frames.
J. C. Mayer & Sons, San Francisco: a large assortment of Imported Furs.
Marden & Folger, San Francisco: samples of Prepared Coffee, Spices, etc.
Miss McGucker, San Francisco: a Quilt.
J. M. Miller, San Francisco: a Cabinet Bee Hive.
McFarlane & Kline, San Francisco: two Horse Hoofs, showing Structure and Mode of Shoeing.
D. Mancarini, San Francisco: Plaster Statuettes, Medallions, Busts, etc.
P. Mezzara, San Francisco: three Busts; one Statuette; one Medalion; case of Cameos, etc.
Mead & Son, San Francisco: three Rocking Horses.
Mrs. Maxwell, San Francisco: case of Crochet Infants' Garments; Knit Work and Quilts; two jars Pickles.
W. H. Morton, San Francisco: an Improved Weather Vane.
J. T. McDougall, San Francisco: specimens of Copper, by Improved Smelting Process; specimens of Copper Ore, and Gold Quartz.
F. P. Medina, San Francisco: specimens of Shell, Worsted and Chenille Work.
Melrose, Zorn & Co., San Francisco: Cast Iron Burial Cases, and Umbrella Stands; Steam Guage; Counter; Patent Liquid Measures, and India-rubber Utensils (imported).
Mrs. Mulney, San Francisco: three pieces Needle-work (the lady 87 years of age).
A. Montlezan, San Francisco: samples of Preserved Eggs.
Mrs. Marsh, San Francisco: a piece of Tapestry Work.
Mission Woolen Mills: twenty-five varieties of Blankets; twelve varieties of Flannels; samples of Shawls; five varieties of Horse Blankets; thirty varieties Broadcloth, Cassimere, Beaver, and Tweed; eight varieties Cloak Cloth.
McLennan & Grisar, San Francisco: six bales Graded and Scoured Wools.

Mrs. McKinley, San Francisco: two Velvet Ottoman Covers.

Mrs. McDonald, San Francisco: Hose and Mittens of Dog's Wool; a vase of Wax Fruit.

Mrs. A. McKeon, San Francisco: a Wire and Straw Bee Hive.

John Mallon & Co., San Francisco: specimens of Ground and Cut Glass.

B. P. Moore & Co., San Francisco: sets of Parlor Furniture, Library Furniture, Reception Chairs, Side Board, Wardrobe, Music Stool, Inlaid Marble Tables, Shaving Stand, School Desk, and Chair.

J. Menu, San Francisco: specimen of Silver Ore, from Maria District, Lower California.

J. W. Mason, San Francisco: two Water Color Pictures.

Mrs. Mickleson, San Francisco: an Embroidered Sofa Cushion, and Ladies' Ivory Work Basket.

C. McFadden, San Francisco: a Model Windmill (juvenile attempt).

A. Marsan, San Francisco: a case of Shell Work.

Warren P. Miller, San Francisco: an Architectural Drawing, and Box Key.

Mrs. Mary McPhail, San Francisco: a Rag Carpet.

Mrs. Morris: case of Shirts, Collars, and Wristbands, and Instrument for Folding Shirt Bosoms.

J. F. McCoasten, San Francisco: two Crayon Pictures, and a Photograph.

Mrs. Moulton, San Francisco: an Embroidered Harp, on Paper.

Mrs. C. A. Miller, San Francisco: two sets Cuffs and Collars.

Miss E. Maffre, San Francisco: a Hearth Rug.

W. McKibben, San Francisco: an Iron Girder.

N

Mrs. H. H. Northeby, San Francisco: one Quilt.

G. M. Norton: Model Amalgamator.

F. T. Neagle, San Francisco: Press Hoop, for Sanitary Cheese, and an Arnass Cask.

Newman Bros., San Francisco: samples of Brushes, of home manufacture.

C. Newman, San Francisco: a Patent Lamp Burner; Self-Sealing Jars; samples of Preserved Fruit, and Box for Collecting Fares.

John Nestor, San Francisco: Metallic Weather Strips.

New York Brewery, San Francisco: samples of Lager Beer.

National Guard, San Francisco: two Pictures.

Nahl Bros., San Francisco: fourteen Re-touched Photographs: eight Water Colored Photographs; fifteen India Ink Drawings; six Water Colored Drawings.

D. Norcross, San Francisco: a case of Regalia, and Military Goods.

Mrs. D. Norcross, San Francisco: a Gimp Mill.

Mrs. H. N. Norcross, San Francisco: a case of Gimps, Fringes, Tassells, and Buttons.

F. Nutz, San Francisco: a Silk Banner.

Mrs. J. Neall, Auburn: a plate of Fruit.

Mrs. H. M. Nolting, San Francisco: a case of Artificial Flowers, and Needle-work.

Mrs. T. J. Nevins, San Francisco: a Child's Bonnet, of Pine Leaves.

G. Nagle, San Francisco: a Photograph.

Nile & Kollmyer, San Francisco: seven Oil Paintings.

Mrs. James Neall, San Francisco: a frame of Phantom Leaves; vase of Wax Flowers, and piece of Crochet Work.

W. Newell, San Francisco: sample of Sub-Pository (Medicine).

J. R. Nickerson, Lincoln: two hundred and twenty-two varieties of Apples; one hundred and two varieties of Pears; eighty-five varieties of Grapes; twenty varieties of Peaches; eight varieties of Quinces, five varieties of Figs; four varieties of Plums; Almonds; Walnuts; Pomegranates; samples of Dried Pears, Apples, Peaches, Plums, Cherries, Blackberries, Raspberries, Figs, Raisins, etc., and samples of Bacon and Hams.

Miss Nolting, San Francisco: two baskets Worsted Flowers; two vases Herbarium; two Pin-Cushions; two pieces Worsted Work.

O

Obermyer & Rappold, San Francisco: a case of Boots. Occidental Laundry, San Francisco: specimens of Laundry Work.

Occidental Hotel, San Francisco: cabinet of Minerals; specimens of Ornamental Confectionery.

F. Otto, San Francisco: specimens of Wood Mouldings, and Book of Patterns.

Osgood & Stetson, San Francisco: an assortment of Tin Ware.

M. O'Brien, San Francisco: a Butcher's Cart.

P. J. O'Connor, San Francisco: a Fruit Piece, in Oil.

J. O'Hare, San Francisco: Green-House Plants, Cut Flowers, Bouquets, Evergreens, and Fruits.

Wm. O'Donnell, San Jose: specimens of Apples, Pears, White and Red Wines, Apple, Peach and Pear Brandy.

J. O'Brien, San Francisco: a Marble Statuette (a child); Plaster Bust (T. Starr King).

Otto & Weichart, San Francisco: a sample of "Carbonum."

D. O'Brien, San Francisco: a specimen of Scroll Sawing.

P

J. Price, Petaluma: a Hay Press.

Heury Paullissen, San Francisco: four pieces of Fresco Painting.

Mrs. M. H. Parker, San Francisco: two Crape and Chenille Cushions.

G. C. Paine, San Francisco: a Baling Press, and a Window Blind.

Miss Popper, San Francisco: a Crochet Buggy Robe.

E. J. Pfeiffer, San Francisco: a Pencil Drawing.

J. Pollack, San Francisco: one Chess Table.

Peet & Son, San Francisco: two Mexican Saddles.

Antonio Perez, Sacramento: specimens of Shell Work.

J. D. Patterson, Alameda: three Spanish Merino Fleeces, and assortment of Wool Samples.

J. Pendergast, San Francisco: a Hot and Cold Shower Bath.

N. Page, San Francisco: specimens of Sugar Pine and Redwood Lumber.

Pratt & Co., San Francisco: a Churn.

Mrs. Pittsinger, Santa Cruz: a Shell Picture Frame.

C. A. Plummer, San Francisco: two Pencil Drawings.

G. K. Porter, San Francisco: five cases Boots and Shoes, of home manufacture.

L. Prevost, San Jose: Silk Cocoons, Worms, and Reeled Silk, of California production.

Pollard & Moore: a Rockaway Carriage.

M. S. Prime, San Francisco: a Full-rigged Model Ship (Donated to Sanitary Fund).

A. J. Plate, San Francisco: a case of Guns, Rifles, Pistols, etc.

M. Price, San Francisco: an assortment of home manufactured Cutlery.

FOURTH INDUSTRIAL EXHIBITION

- Paltenghi & Larsenieur, San Francisco: one Statuary Mantle; Bust and Marble Column; Marble Shell Sleeping Baby; six Stone Caricatures.
- Powder Works (Cal.), Santa Cruz: samples of Sporting and Blasting Powder.
- D. L. Perkins, Alameda: assorted samples of Domestic Seeds, and a Squash grown in 1861.
- Plummer & Co., Alameda: samples of Salt.
- H. J. Painc, San Francisco: a case of Dental Work.
- J. W. Parker, San Francisco: a Drawing of the Gould & Curry Engine.
- Miss M. Parker, San Francisco: a Knit Quilt.
- John Patterson, San Francisco: twelve Medallion Portraits, and two Busts.
- G. Pfaffs, San Francisco: three Flutes; two Clarionets, and an Oil Painting.
- W. Patton, San Francisco: a Photograph, and Architectural Drawings.
- Miss Pearson: a specimen of Penmanship.
- E. B. Prater, San Francisco: a Mineral Concentrator.
- Pinkerton & Sherman, San Francisco: specimens of Ornamental Wood Painting.
- S. Pomeroy, San Francisco: a piece of Carving, for Banjo Neck.
- Pacific Iron Works: a Sixty-horse Power High-pressure Steam Engine, with Grecian Patent Cut-off, and a Five-stamp Quartz Battery.
- J. Patterson, Placerville: specimen Inkstand; Paper, Weights, etc., of Steatite.
- Peck & Vnard, San Francisco: sample of Composition for Cleansing Steam Boilers.
- Mrs. Spencer Poole: a case of Plain and Ornamental Needle-work.
- S. Pillsbury, San Francisco: specimen of Silver Ore.
- Pioneer Woolen Mills: fifteen varieties of Blankets; eight varieties of Cassimeres; six varieties of Flannels; Sluice Blankets; Under Shirts, Drawers, etc.
- G. C. Paine, San Francisco: a Model Window Blind.
- Russell & Erwin Manufacturing Co., San Francisco: three of Lillie's Safes, and samples of Locks and Door Furniture (imported).
- H. Reid, San Francisco: specimens of Silver and Copper Ore, and Ingots from Cordilleras Mine, Mexico.
- Miss Read, San Francisco: an Apron.
- L. E. Reynolds, San Francisco: twenty-five Architectural Drawings.
- Roos & Wunderlich, San Francisco: a case of Artists' Materials, and fifteen Pictures.
- Miss A. H. Ruggles, San Francisco: a Framed Hair Wreath.
- Z. Rice, San Francisco: a case of Locks, Keys, etc.
- Toby Rosenthal, San Francisco: four Paintings.
- James Roberts, San Francisco: an Oil Painting
- Mrs. A. Rotanzi: two Crayon Drawings.
- Mrs. Rosenwigs, San Francisco: a piece of Worsted Work.
- Robinson & Snow, San Francisco: fifteen Engravings, Chromos, etc.
- Mrs Regnes, Alameda: four pieces Needle-work.
- T. Reeves, San Francisco: an Improved Oil Glebe.
- W. D. Root, San Francisco: a Tire-Upsetter and Punch Combined.
- Mrs. S. W. Rix, San Francisco: a pair of Wrought Slippers.
- Mrs. F. Roncarti: a piece of Bead Work.
- J. O. Rowell, Columbia: a piece of Tapestry (" Signing the Declaration of Independence").
- Rix, Logan & Small, San Francisco: a Hammer Quartz Mill.
- Russ House Laundry, San Francisco: a case of Laundry Work.
- Redington & Co., San Francisco: samples of Hair Restoratives.
- W. Reynolds, San Francisco: a Japanese Inlaid Stand.
- J. H. Richardson, San Francisco: an India Ink Chess Board.

Q

- Mrs. Queen, San Francisco: a Crochet Quilt.
- J. W. Quick, San Francisco: two Perforated Iron Screens.

R

- S. Rosenblatt, San Francisco: a case of Laces, and Rich Fancy Articles.
- C. R. Bice, San Francisco: specimen Horse Shoes, and Shoeing Hammer.
- B. H. Ramsdell, San Francisco: specimens of Black Diamond (Mount Diablo) Coal.
- Mrs. J. T. Ryder, San Francisco: a piece of Needle-work.
- John Reed, San Francisco: a Whitehall Four-oared Boat, and Model Life-boat.
- W. Rudolph, San Francisco: a case of Fire-Arms (imported).
- L. Ransom, San Francisco: three Pencil Drawings.
- Thomas Reilley, San Francisco: a case of Gold and Silver Leaf.
- Ricci & Co.: twenty-four bottles Punches.
- J. C. Ruppenthal, San Francisco: a large Wine Cask.
- Mrs. J. A. Rawson, San Francisco: one Crochet Counterpane; one Opera Shawl; two Tidies, and two Collars.
- Henry Roullier, San Francisco: three Pencil Drawings.
- Risdon & Coffey, San Francisco: a Self-supporting Chain Pulley.
- P. W. Randall, San Francisco: a Papier Mache Chess Table.

S

- Z. Sikes, Santa Clara: a Roller, and Grain Drill.
- G. Stevens, Redwood City: a "Monitor" Washing Machine.
- J. Scoville, San Francisco: a Portable Clamp Drill.
- W. Saunders, San Francisco: two Improved Whiffle-trees.
- Jacob Stern, San Francisco: a Pencil Drawing.
- Mrs. Simmoins: a frame of Fancy Hair Work.
- Mrs. Sickel: two cases Hair Dye and Tinctures.
- Steinweg, San Francisco: a Pencil Drawing.
- Mrs. Sherman, San Francisco: a Quilt.
- L. H. Short, San Francisco: five Drawings.
- Mrs. Souther, San Francisco: two Quilts.
- S. Sweet, San Francisco: a box of Natural Leaf Tobacco.
- Mrs. Schiedell, Marysville: three Tidies.
- Mrs. Sessions, San Francisco: two frames Sea Moss; piece of Hair Work, and Cord of Crochet.
- A. W. Stratton, San Francisco: a Hydraulic Pump, and two Presses.
- Geo. Schmidt, San Francisco: a case of Hair Jewelry.
- Mrs. Scoffey, San Francisco: a case of Shells.
- Shedd & Wright, San Francisco: samples of Oregon Pitch, and Bright Varnish.
- Solomon & Sons, San Francisco: a case of Upholstery Goods (imported).
- Adolph A. Son, San Francisco: a case of Meerschaum Pipes (imported).
- Sprung & McArron, San Francisco: a Side-spring Buggy

- D. Stoddard, San Francisco: a Steam Pump; a Blacksmith's Drill, and seven Giffard's Injectors.
- H. Schumann, San Francisco: a case of Meerschaum Pipes (imported).
- J. & W. C. Salmon, San Francisco: an Amalgamator, and a Churn.
- A. J. Smith, San Francisco: one of Hudson's Patent Pumps.
- R. A. Swain & Co.: a case of Glass, China, and Plated Wares.
- Steele & Co., San Francisco: an assortment of Trunks, Valises, Traveling Bags, etc.
- A. Searls & Co., San Francisco: a Physician's Phæton; Top Tub Buggy; Brett Tub Buggy; one Light Top Buggy, and one Open Buggy.
- J. H. Swain, San Francisco: a case of Fine Boots.
- J. C. Sack, San Francisco: a case of Optical and Philosophical Instruments (imported).
- J. Stewart & Co., San Francisco: samples of Rosin and Turpentine, from W. G. Jones, Butte county.
- S. W. Shaw, San Francisco: nine Oil Paintings.
- John Simms: specimens of Copper Ore, from the Fall Creek Lode, Oregon.
- B. F. Stillwell & Co., San Francisco: two Advertising Frames.
- Jacob Strahle & Co., San Francisco: two Billiard Tables.
- Mrs. B. A. S., San Francisco: a piece of Tatting.
- D. A. Stone, Watsonville: specimen of Coach Painting.
- W. Schmolz, San Francisco: two large Bullion Scales; two Assay Balances; two cases of Engineers' and Surveyors' Instruments; one Universal Instrument, and one Meridian Transit Instrument.
- Jacob Shew, San Francisco: two fraines "Carte de Visites," and fourteen Photographs.
- Mrs. H. Simmons: a piece of Worsted Work.
- N. W. Spaulding, San Francisco: two Patent Tooth Circular Saws; samples of Steel-faced Machine Plane Irons, and Moulding Cutters.
- St. Louis Brewery: samples of Lager Beer.
- Mrs. J. L. Sanford, San Francisco: Chenille Work; Flannel; Flannel Skirt; Handkerchief; Infant's Robe, and two frames Sea Moss.
- Miss Schmidt, San Francisco: a Knit Quilt.
- Mrs. Snider, San Francisco: three Oil Paintings.
- Miss Swain, San Francisco: one Oil Painting, and three Crayons.
- M. C. Smith, San Francisco: a specimen of Penmanship.
- Miss L. Strauss, San Francisco: one Rug; three Tidies; two pieces Bead Work; one piece Wool Work.
- Mrs. J. H. Snyder, San Francisco: one Hanging Shell What-Not.
- Miss L. Salmon, San Francisco: an Embroidered Skirt, and Sleeves.
- Standard Soap Co.: samples of Soaps.
- S. D. Simmons, San Francisco: piece of Needle-work, and Instrument for Beating Cake and Eggs.
- T. G. Sanford, San Francisco: Gentlemen's Clothing, and Crochet Buggy Robe.
- Melville Simmons, Mare Island: a Pilot Boat Model.
- Wm. Shew, San Francisco: forty-six Photographs.
- C. V. Shead, San Francisco: two Landscapes, in Oil.
- L. F. Sanderson, San Jose: thirty-eight varieties of Pears.
- E. C. Stock, San Francisco: copy of "Alta California," May 15, 1851.
- W. Shaddock, San Francisco: one frame Carving and Gilding.
- C. M. Sickler, San Francisco: three Imported Cooking Stoves.
- E. T. Steen, San Francisco: one Reynold's Steam Cut-Off.
- Smith & Hanscom, San Francisco: a Turbine Water-wheel, and a Model.
- G. Spaulding, San Francisco: copy of "Boston Chronicle," 1768; copy of "Annual Register," 1769.
- H. S. Smith, San Francisco: two lots Dunbar's Patent Piston Packing Rings.
- Frank Stæglich, San Francisco: a Model Labyrinth; Seeds, and Ornamental Trees.
- San Francisco Cordage Co.: fifteen coils of Cordage.
- San Francisco Pacific Sugar Refinery: samples of Refined and Unrefined Sugars, of every grade.
- V. Squarza, San Francisco: a Patent Faucet, and thirty bottles of Punches, Bitters and Wines.
- Andrew Stevens, San Francisco: sets of Pressure Piston Packing.
- J. A. Sickel, Danville: two Pen Sketches, and piece of Sculpture.

T

- M. E. Traver & Bro., San Francisco: eight "Eureka" Clothes Wringers.
- S. P. Taylor, San Francisco: fourteen bales of Printing and Wrapping Paper, from Pioneer Paper Mills, Marin county.
- R. L. Tabor, San Francisco: India Ink Drawing.
- Mrs. Trimble, San Francisco: a Quilt.
- F. M. Trucworthy, San Francisco: samples of Stencil Impressions.
- Mrs. Tolle, San Francisco: a case of Fancy Work.
- Mrs. H. Tomas, San Francisco: a Bead Card Basket.
- Teubner & Hoffman, San Francisco: three Plated Frame Show Cases.
- E. J. Turkington, San Francisco: a Banjo (improved head).
- A. & T. Torning, San Francisco: specimens of Sign Writing.
- Armand Ticciare, San Francisco: eight Water Color Pictures.
- G. Torney, San Francisco: two specimens of Penmanship.
- L. R. Townsend, San Francisco: an Architectural Drawing.
- P. Toft, San Francisco: five Water Color Pictures.
- Oscar Tolle, San Francisco: a piece of Shell Work.
- Mrs. G. W. Traver, San Francisco: a Breakfast Shawl.
- Tay, Brooks & Backus, San Francisco: a case of Japaned Tin and Iron Ware, Planished Ware, Pressed Ware, etc.; "Monitor" Wrought-iron Stove.
- Mme. L. Terme, San Francisco: case of Theatrical Costumes.
- Mary M. Tompkins, San Francisco: a piece of Fancy Knit Work.
- John Taylor, San Francisco: a case of Druggists' and Chemists' Glassware, Assayers' Articles, etc.
- Twiss, Skillinger & Kimball, San Francisco: an Improved Spring Bedstead.

U

- Union College Pupils: twelve Water Colored Pictures; two Crayon and three Mechanical Drawings.
- Mrs. Uszynski, San Francisco: a case of Hair Jewelry.
- United Anahiem Wine Growers Association: an assortment of Native Wines and Brandies.
- Mrs. A. Unger, San Francisco: a vase of Wax Flowers.

FOURTH INDUSTRIAL EXHIBITION

V

J. Villegia, San Francisco: three Double-barreled Shot Guns.
 Miss Von Roon, San Francisco: a Crochet Bed Quilt.
 L. Van Laak, San Francisco: one dozen Cal. Brooms.
 Mrs. J. H. Van Reed, San Francisco: a Japanese Lily.
 Van Winkle & Duncau, Sacramento: a Tire Upsetting Machine.
 Mrs. T. Varney, San Francisco: two Oil Paintings.
 Thos. Varney, San Francisco: two Full-size Amalgamators; two Small Amalgamators.
 J. B. Vanauken, Oakland: a Patent Churn.
 Mrs. R. Velasco, San Francisco: six pieces Embroidered Skirts; two Embroidered Handkerchiefs; Silk Embroidered Mexican Flag; two Flowered Lamp Mats.
 Vulcan Iron Works Co.: a Fan Quartz Crusher.
 Durbin Van Vleck, San Francisco: specimens of Wood Engravings.
 Mme. Pauline Verdier, San Francisco: a case of Millinery Goods.
 Mrs. M. E. Woods, San Francisco: a piece of Hair Work.

W

Wideman & Chappas, Marysville: two bottles "Alpine" Bitters.
 D. & H. A. Winter, San Francisco: a Patent Seed Planter and Cultivator.
 J. O. Wright, San Francisco: an Improved Window Blind Hinge.
 Mrs. Wade, San Francisco: two Worsted Pictures, and a Table Cloth.
 P. Wilson, San Francisco: a Full-rigged, Timbered and Planked Model Ship.
 Miss Webster, San Francisco: two Oil Paintings.
 W. H. Williams, San Francisco: two Architectural Drawings.
 H. G. Walton, San Francisco: a Volume, "Statistics of the Mariposa Estate"—specimen of Compilation and Penmanship.
 E. W. Walton, Amador county: a Wine Press and Mill Combined.
 Will & Finck, San Francisco: two Hotel Annunciators (imported); case of Home Manufactured Cutlery.
 J. Weichert, San Francisco: a Fire-proof Safe, and specimens of Moulding Cutters.
 J. T. White, San Francisco: four Water Colored Pictures.
 White & Noyes, San Francisco: two Hair Bridles and Head Stalls.
 G. L. Wenzel, San Francisco: one Liquor Cask.
 G. M. Wood, San Francisco: specimens of Stencil Plates and Impressions.
 Mrs. Wagner, San Francisco: a case of Hair Work.
 J. Wilson & San Francisco: a Fireman's Cap; six Horse Collars, by Alex. Logau.
 Wheeler & Randall, San Francisco: a Quartz Grinder and Amalgamator.

Miss M. E. Webster, San Francisco: an Oil Painting.
 W. Wadsworth, Sacramento: a Patent Soil Tiller.
 Bernard Wolf, San Francisco: a pair of Shells.
 W. P. Wright, San Francisco: a Portrait.
 Mrs. E. Watterman, San Francisco: an Opera Cape.
 D. Winter, San Francisco: specimens of Gilding and Embossing on Glass.
 G. Winter, San Francisco: two Glass Signs, Gilt and Embossed: one Scrip Glass Sign.
 R. Winter, San Francisco: thirty Colored Photographs and "Carte de Visites."
 Wasserman & Co., San Francisco: three German Oil Paintings.
 T. G. Wood, San Francisco: three Pencil Drawings.
 J. B. Wandesford, San Francisco: twelve Water Colored Pictures.
 Wheeler & McAuley, San Francisco: one Hydraulic Pressure Engine; one Model do.
 J. C. White, Sonoma: sixty-nine varieties of Apples.
 G. F. Walter & Co., San Francisco: one Suit of Mens' Garments.
 Mrs. Watkins, San Francisco: one Silk Quilt.
 Mrs. E. Weisfarrow: a Crochet Bed Spread.
 Miss Wollenburgher: one piece Crochet Work.
 Miss B. Weed: a piece of Crochet Work.
 Worthley & Co., San Francisco: three Mammoth Pumpkins; Two Squashes, and Sheaf of Oats.
 R. Weber: one Hair Boquet, in frame.
 J. M. B. Weatherwax, El Dorado county: thirteen Bartlett Pears.
 H. W. Williams, Tuolumne county: a lot of Crystallized Gold Quartz Specimens, from Whisky Hill claim.
 A. B. Winegar, San Francisco: samples of Salt.
 I. H. Wood, Napa: samples of Natural Soda, from the Napa Springs.
 E. G. Woodside, San Francisco: one Model Improved Carriage Spring and Thorough Brace Reliever.
 A. Whitman, San Francisco: two pairs of Tangled Elk Horns.
 Miss E. D. Weeds, San Jose: two pieces Worsted Work.
 C. L. Weed, San Francisco: thirty large Photographic Landscapes—views of Yosemite, Big Trees, etc.

Y

H. Yale, San Francisco: Indian Curiosities.
 Mrs. Chapman Yates, San Jose: seven Tapestry Pictures.
 Miss Young, San Francisco: one Crochet Bedspread.

Z

Zwick & Löven, San Francisco: nine boxes Extract Coffee.
 Fred. Zech, San Francisco: two Pianos.
 Jacob Zech, San Francisco: two Pianos.

ART GALLERY.

C. L. WEBB.

1. Three Brothers.
2. Yo-Semite Fall, 2,600 feet.
3. Sentinel Rock.
4. View from the Coulterville Trail.
5. The Original Big Tree.
6. Big Tree Hotel.
7. South Dome, from the Little Yo-Semite Valley.
8. Looking Down the Valley.
9. Nevada Fall, 700 feet.
10. Little Yo-Semite Valley.
11. Looking Up the Valley.
12. South Dome, distant view.
13. Mount King.
14. Yo-Semite Valley, from Inspiration Point.
15. Cathedral Rocks.
16. Bridal Veil.
17. Sentinel Rock, distant view.
18. Mirror Lake.
19. North Dome.
20. South Dome, from the south side.
21. South Dome, from Mirror Lake, 6,000 feet high—lately measured by Prof. Brewer.
22. Hercules, Big Tree Grove.
23. The Sentinels, Big Tree Grove—the tallest one 327 feet, diameter 25 feet.
24. No Name.
25. Yo-Semite Fall, close view.
26. Bellows' Butte.
27. Vernal Fall.
28. Cascade, Little Yo-Semite Valley.
29. No Name.
30. El Capitan.

JACOB SHEW.

Photographs.

31. General McDowell.
32. " "
33. Doctor Bellows, D. D.
34. Doctor Zeile, M. D.
35. Frank Mayo.
36. Of a Lady.
37. Of a Gentleman, 7.
44. Frames Cartes de Visite, 10.

A. P. JOHNSON.

Photographs.

54. Stephen A. Douglas, life size.
55. Commodore Watkins, life size.
56. Doctor I. Rowell, life size,
57. Gentlemen, life size, 5.
62. Lady, life size.
63. Doctor McNaughton.

64. Gentlemen, Imperial, 6.

70. Miss Rand.
71. Ladies, cabinet, 6.
77. Ladies, full length, 2.
79. Boys, full length, 2.
81. 72 U. S. Senators and Congressmen, 2 frames.
83. Cartes de Visite, 6 frames.

DR. I. ROWELL.

89. Marble bust of Pius IX., present Pope of Rome.
90. California Views, 1 frame.

WILLIAM SHEW.

Photographs.

91. Rev. Dr. Bellows.
92. Rev. Dr. Thrall.
93. Rev. T. Starr King.
94. Hon. D. C. Broderick.
95. Hon. John Conness.
96. General John A. Sutter.
97. General Sumner.
98. General Houston.
99. Rev. Dr. Lacy.
100. Rev. Mr. Cameron.
101. Rev. Mr. Bayles.
102. Mr. Belcher, Grand Master Masons.
103. David Scannell, Chief Engineer Fire Department.
104. Lady, imperial size.
105. Little Girl.
106. Gentlemen, 14.
120. Cartes de Visite, 5 large frames.
125. " " 11 small frames.

WATKINS.

Photographs.

136. Cathedral Rocks, Yo-Semite.
137. Royal Arches, Yo-Semite.
138. Camp Grove, Yo-Semite.
139. Falls, Yo-Semite.
140. The Lake, Yo-Semite.
141. Cascade, Nevada Falls, Yo-Semite.
142. View on the Merced, Yo-Semite.
143. Falls Yo-Semite, River, Trees, Yo-Semite.
144. El Capitan, 3,600 feet high, Yo-Semite.
145. El Capitan, 3,600 feet high, Yo-Semite.
146. The Bridal Veil, Yo-Semite.
147. The Half Dome, 4,967 feet high, Yo-Semite.
148. Outline Half Dome, 4,967 feet high, Yo-Semite.
149. The Grizzly Giant, Big Trees.
150. Cathedral Spires, Yo-Semite.
151. Sentinel Rock (valley view), Yo-Semite.
152. Sentinel Rock, 3,700 feet high, Yo-Semite.
153. Three Brothers. 4,480 feet high, front view, Yo-Semite.

FOURTH INDUSTRIAL EXHIBITION

154. North Dome, 3,729 feet high, Yo-Semite.
 155. Cathedral Rock, Yo-Semite.
 156. Vernal Fall, 300 feet high, Yo-Semite.
 157. Nevada Fall, 700 feet high, Yo Semite.
 158. Up the Valley, Yo-Semite.
 159. Mt. Broderick, Nevada Fall, Yo-Semite.
 160. Washington Column, Yo-Semite.
 161. Down the Valley, Yo-Semite.
 172. View from Camp Grove, Yo-Semite.
 163. Side View Yo-Semite Falls, 2,360 feet high.
 164. The Domes, Yo-Semite.
 165. Street View, New Almaden.
 166. The Town on the Hill, New Almaden.
 167. The Mine Peak, New Almaden.
 168. First View of the Mine, New Almaden.
 169. The Works and the Mine, New Almaden.
 170. The Smelting Works, New Almaden. 2.
 172. Chinese Pagoda, New Almaden.
 173. Coast View, Mendocino county.
 174. Fort Bragg, Mendocino county.
 175. Pioneer Cabin, Mendocino county.
 176. Indian Rancheria, Mendocino county.
 177. Coast View, Mendocino county.
 178. Albion River, Mendocino county.
 179. Entrance to Albion River, Mendocino county.
 180. Academy Notre Dame, San Jose.
 181. Santa Clara College, Santa Clara. 2.
 183. Catholic Church, Santa Clara.
 184. In Camp.
 185. The Golden Gate, from Telegraph Hill.
 186. Bay View, from North Point.
 187. Residence of Capt. Williston, San Francisco.
 188. The Custom House, San Francisco.
 189. Residence of Mr. Stephens, San Francisco.
 190. Residence of D. T. Adams, San Jose.
 191. San Francisco.
 192. Frames Stereoscopic Views.

A. EDOUART.

Photographs.

193. Rev. Dr. Wadsworth.
 194. Thomas S. Fisk.
 195. Paul Julien.
 196. Miss L. Sweet.
 197. Frank Mayo.
 198. A. Edouart.
 199. Dr. R. B. Cole
 200. Gentlemen. 2.
 202. Children. 3.
 205. Frames, Cartes de Visite, Photograph, colored drawing. 3.

BRADLEY & RULOFSON.

Photographs.

209. Judge Hastings (life size).
 210. John Nugent.
 211. Commodore Watkins.
 212. Miss Clifford.
 213. General J. S. Ellis.
 214. General U. S. Grant.
 215. Rev. A. Kittredge.
 216. Full length, plain.
 217. Full length, finished in Water Colors.
 218. Retouched. 4.
 222. Group of 8 persons.
 223. Groups. 2.
 225. Plain. 8.
 233. In Water Colors, copy from smaller.
 234. Cabinet Photographs.
 235. Frames Carte de Visite, etc. 12.

FORTUNATO ARRIOLA.

Portraits in Oil.

242. Mrs. Alexander.
 243. Mr. _____.
 244. Mrs. _____.
 245. F. Arriola.

WISE & PRINDEL.

Portraits.

246. Captain Young.

247. Nathaniel Page.
 248. A. J. Pope.
 249. Lady.
 250. Child (head).
 251. Child (full length).
 252. Water Colored Photograph Group.

Photographs.

253. Mr. Murdock.
 254. General Clark.
 255. General McPherson.
 256. Governor Downey.
 257. General Zachary Taylor.
 258. Sherman Day.
 259. Captain Ogden.
 260. W. G. Badger..
 261. Joseph Ford.
 262. Vincente Squarza.
 263. General Sumner.
 264. Mrs. Swift.
 265. Mr. Halliday.
 266. Captain Connor.
 267. Mr. Wallace.
 268. Mr. Hooper.
 269. Dog Yuno.
 270. Two frames Cartes de Visite.

SHAW.

Portraits in Oil.

279. Washington.
 280. Martha Washington.
 281. Colonel E. D. Baker.
 282. W. G. English.
 283. Colonel Davis.
 284. Miss Mitchell, of Georgia.
 285. Thomas Starr King.
 286. A Child.
 287. A Child.

NILE & KOLLMYER.

Paintings in Oil.

288. Italian Wine-Cellar and Fruit Girl—Flemish school.
 298. Diogenes (looking for a man).
 290. Capuchin Monk.
 291. Fruit Pieces.
 292. Fruit Pieces.
 293. Fruit and Poultry.
 294. Painting.

THOMAS BEALE.

295. Portrait by William Daniels, Liverpool.

MISS E. BROWN.

296. Oil Painting.

S. M. BROOKES.

297. Portrait, Colonel James.
 298. Head of Child.
 299. Dead Game.
 300. Portrait of Dr. E. S. Cooper.
 301. Portrait of J. Patterson.
 302. Fruit Pieces, Grapes, Melons, etc.
 303. Fruit Pieces, Grapes, etc., on basket.
 304. Fruit Pieces, Pineapples, Bananas, etc.
 305. Fruit Pieces, Pears, Peaches, etc.
 306. Bouquet of Flowers.
 307. Fish of California.
 308. Salmon, Trout and Codfish.
 309. Head of Child.
 310. Bust of Thomas Starr King.
 311. Portrait of Colonel Ringgold.

MISS E. M. BRACKETT.

312. Head in Crayon.
 313. Head in Crayon.

G. J. DENNY.

Paintings in Oil.

314. The Child Samuel.
 315. Portrait of a Gentleman.
 316. Pilot Boat on San Francisco Bay.
 317. Sunset on San Juan River, Nicaragua.

318. San Francisco Harbor.

319. Morning.

320. Evening.

321. Two Maine Views.

322. Imogene entering the Cave.

323. Fort Ross, Sonoma county.

WOOL & SUTHERLAND.

324. Loudon Heights, on the Sherandoah River, Virginia—oil Painting by W. L. Sontag, New York.

R. S. EELS.

325. Portrait in Oil, by Carpenter of New York.

F. A. BUTTMAN.

Paintings in Oil.

326. Morning View of Mt. Shasta, from Shasta Valley.

327. Coast Scene, Bay of Monterey.

328. Mountain Scene, Siskiyou county.

329. View on the San Lorenzo, Santa Cruz county.

330. Ruins of San Carlos Mission Church, Monterey.

331. Sunset on the Chagres River.

T. HILL.

Paintings in Oil.

332. Sunset View in Russian River Valley.

333. View of Napa Valley, from Soda Springs.

334. View of Lake Tahoe, from Western Summit.

335. Two Views on the American River.

336. Sunrise in Russian River Valley.

337. Emerald Bay—Lake Tahoe.

338. Six Portraits and one Fancy Sketch.

MISS M'NULTY.

339. Copy of Hayes' celebrated Picture, "The Approaching Combat," as exhibited in the Sanitary Fair in New York.

ROBINSON & SNOW.

Engravings.

340. The Outcast of the People, after Herbert.

341. The Challenge, after Landseer.

342. The Sanctuary, after Landseer.

343. Windsor Castle, after Landseer.

344. Eminent Inventors, after Schussell.

345. Washington, after Stewart.

346. The Fountain, after Dobson.

347. Faults on Both Sides, after Faed.

348. Heart of the Andes, after Church.

349. Birthplace of the Locomotive, after Lucas.

Chromos.

350. Summer, after Wainwright.

351. Winter, after Wainwright.

352. Yo-Semite Valley, after Ayres.

353. Woodland Gatherings, after Hunt.

354. Hawthorne, after Cooper.

355. Primrose, after Cooper.

356. Baiting the Hook, after Henzell.

357. Thomas Starr King, photograph, from life.

358. San Francisco, by Gifford, lithograph.

COL. L. RANSOM.

Pencil Sketches.

359. From Nature.

360. Muckross Abbey, Lakes of Killarney, from Nature.

361. Pass between Lakes of Killarney, from Nature.

W. SHEW.

Photographs Retouched.

362. Life Sized, 5.

363. Imperial, 6.

364. Cabinet, 8.

372. Small, 11.

382. Cartes de Visite, 5 large frames.

383. Cartes de Visite, 1 small frame.

PUPILS INDUSTRIAL DRAWING ACADEMY.

384. Mechanical Drawing of a Locomotive, Jules Fleury.

385. Beam Engine, Mechanical Drawing, M. Hainque.

386. Gould & Curry Co.'s Engine, Mechanical Drawing, John W. Parker.

- 387. Portable Oscillating Engine, Mechanical Drawing, Michael Farley,
- 388. Study in Shading, Mechanical Drawing, Jefferson Kindleburger.
- 389. Geometrical Figures, Mechanical Drawing, Jefferson Kindleburger.
- 390. Moulding, Mechanical Drawing, Jeff. Kindleburger.
- 391. Tiller Block, Mechanical Drawing, G. Kleinklaus.
- 392. Universal Hanger, Mechanical Drawing, L. Trouin.
- 393. Tuscan Capital, Architectural Drawing, T. Welsch.

NORTON BUSH.

- 394. Mount Diablo, from Pacheco Valley.
- 395. Coast Scene near the Cliff House.
- 396. Temple of Tivola.
- 397. An Evening Study—original.
- 398. Eve of Waterloo, from Vernet.
- 399. Sketch, by Gropsey, of New York.

GOLDSMITH BROTHERS.

- 400. Interior of a German Country Inn.
- 401. Market Wagon Resting at Noon.
- 402. Winter—Mending Sledge.
- 403. Picture.
- 404. Pair of Fruit and Game.
- 405. Picture, Landscape.
- 406. Horses and Grooms.
- 407. Station Boys.
- 408. Copies from Minolo.
- 409. The Tobacconist.
- 410. Landscape, houses and figures.
- 411. Summer Landscape.
- 412. Winter Scene.
- 413. Pair of Painted Landscapes.
- 415. Same.
- 416. Moonlight, and
- 417. Companion Picture.
- 418. Perspective Landscape and Figure.
- 419. Winter Moonlight.
- 420. Companion Picture.
- 421. Dutch Village Church.
- 422. Pair of painted Landscapes.
- 423. Same.
- 424. Waterfall.
- 425. Landscape, with Figure and Cattle.
- 426. Companion Picture.
- 427. Dutch Scene on the Canal.
- 428. Companion Picture.
- 429. Moonlight on Pannel.
- 430. Landscape—Night.
- 431. Landscape—Morning.
- 432. Marine Sea Piece.
- 433. Mountain Landscape.
- 434. Companion Picture.
- 435. Marine Landscape, Fishing Boats.
- 436. Companion Picture.
- 437. Mountain Waterfall.
- 438. Fancy Portrait.
- 439. Landscape and Figures.
- 440. Landscape, and
- 441. Companion Picture.
- 442. Castle, Moonlight.
- 443. Scene in the Country, Houses.

E. W. PERRY, JR.

- 445. Italian Girl Gathering Grapes.
- 446. Portrait of a Young Lady.
- 447. Portrait of an Old Lady.
- 448. Portrait of a Gentleman.
- 449. Landscape, Sentinel Rock, Yo-Semite Valley.
- 450. Scene in Sonoma Valley, near Healdsburg.
- 451. The Pet Dove.

VIRGIL WILLIAMS.

- 452. Landscape, South Dome, Yo-Semite Valley.

W. F. BAYLEY.

- 453. Four Cabinet Size Retouched Portraits.
- 454. Two double whole, one plain, and one in Water Colors.
- 455. Three frames Carte de Visite, various styles.

FOURTH INDUSTRIAL EXHIBITION

W. VALLANCE GRAY.

456. "The Chase," original study in Crayon.
 457. Albert E. Kittredge, original Portrait; the head from a Carte de Visite.

OSCAR KALTSCHEIMDT.

Oil Paintings.

459. Christopher Columbus in Chains.
 460. Fredrich Von Schiller.
 461. Two Paintings.
 462. Portraits of Children, in life size, from life.
 464. Two Paintings in half size. Portraits of Ladies, from life.
 466. Mrs. Thomas Starr King, from a Card.
 467. Fancy Head (copy).
 468. Scene of the Rhine.

Water Color Paintings.

469. Four Bust Portraits, Photographs painted in Water Colors.
 473. India Ink Drawing, from a Card.
 474. Gentleman in full size. Three Photographs painted in Water Colors.
 477. Represents Children. One Photograph Family Group in Water Colors.
 478. One Vignette Indian Ink Drawing, from a Daguerreotype.
 479. Three Miniature Portraits on Ivory.

N. T. JOHNSON.

Water Colors.

482. Group of Three Children.
 483. Group of Two Children.
 484. Bust of a Gentleman.
 485. Bust of a Gentleman, in oval frame.
 486. Bust of a Lady, in oval frame.
 487. Peach and Tomato, in oil colors.
 488. Head of Boy, from life, in pencil.
 489. Head of Old Man, from life, in pencil.
 490. Young Lady, in water colors.
 491. Young Lady, in India ink.
 492. Rev. T. Starr King, in India ink.
 493. Young Lady, in India ink.
 494. Young Gentleman, in India ink.

GEO. H. BURGESS.

495. Portrait of T. Starr King, finished in India Ink, life size.
 496. Moonlight in Puget Sound: Encampment on an Island, from Nature.
 497. View at Lower End of Yo-Semite Valley, water colors, from nature.
 498. Head of Lady, painted in water colors, after nature (not a photograph).
 499. Portrait of a Lady, in water colors.
 500. Portrait of a Gentleman, retouched photograph.

HUBERT BURGESS.

501. Specimens of Pen Drawing
 502. Winter Scene, pencil drawing.
 503. Summer Scene, pencil drawing.
 504. Rose, pencil drawing.
 505. Spaniel's Head, in crayon.

ROOS & WUNDERLICH.

506. Equestrian Portrait of Washington, painted by John Ford, engraved by W. Hill.
 507. Benevolence, painted by E. Dubufe, engraved by H. Eichens.
 508. Morning in the Highlands, Rosa Bonheur.
 509. Light of the World, Holman Hunt, W. H. Simons, engraver.
 510. Christian Martyr, Paul Delaroche, engraved by Hermann.
 511. The Flight to Egypt, J. Portaels, engraved by Annedouche.
 512. Niagara Falls, lower view, Church.
 513. Sympathy and Contemplation, colored photographs.
 514. Lake George, Casilear, engraved by Hinshelwood.
 515. Evening in the Tropics, Mignot, engraved by S. V. Hunt.

516. Home of Washington, Rossittee & Mignot, engraved by Thos. Oldham Barlow.
 517. The Heart of the Andes, Church, engraved by Wm. Forest.
 518. Noon on the Lee Shore, Kensett, engraved by S. V. Hunt.
 519. Morning in the Tropics, Church, engraved by S. V. Hunt.

ROBERT WINTER.

520. Master Percy Edouart of San Francisco.
 521. Portrait in Water Colors, W. L. Richardson.
 522. Albuman, colored, Mrs. ——
 523. Miss Matlock, of Philadelphia.
 524. Miss Howard, of Philadelphia, as a Fireman.
 525. Boy, of Philadelphia.
 526. Ivorytype, Cuban Gentleman, Havana.
 527. Ivorytype Photograph; copy from a French Painting, representing the Three Roses.
 528. Mr. M. Ford, late Photographer of San Francisco.
 529. Copy from a Daguerreotype.
 530. Lady of Philadelphia.
 531. Unknown, San Francisco.
 532. Eighteen Cartes de Visite, miniature style.

J. B. WANDESFORDE.

Water Colors.

550. Goatfell, Island of Arran.
 551. Portrait of a Lady.
 552. Group of Children. Portraits.
 553. Portrait of a Young Lady.
 554. Island of Arran, from Ardrossan.
 555. Portrait of "Thomas Cat."
 556. Sir Fenwick Williams, of Kars.
 557. Miniature Portrait.
 558. Portrait of a Boy.
 559. Portrait of a Girl.
 560. Miniature.
 561. Miniature.

TOBY ROSENTHAL.

562. Portrait of a Child, in oil, from life.
 563. Jewish Rabbi, in oil.
 564. Innocence, Fancy Sketch.

C. D. SHED.

565. Landscape, in oil; do. Vancouver's Island, in oil.

MARIANNE MATHIEU.

566. Landscape, water color.

MISS SWAIN.

567. Portrait, in oil.
 568. Three Portraits, crayon.

AMALIA ROTTANZI.

571. Two Crayon Drawings.

A. TEISSEIRE.

573. Five Paintings, in water colors.
 578. Three Pictures, in crayon.

MRS. SNYDER.

581. Three Sketches, in oil—effort after two lessons.

W. KOCH.

584. Oil Painting, Cattle.

W. T. MOFFITT.

585. Robert Burns, by Nasmyth.

MISS E. M. BRACKETT.

586. Crayon Drawing.

M. R. ROBERTS.

587. Painting—Joseph and Mary, and the Child.
 588. Painting, Beatrice di Cence.
 589. Six Oil Paintings.

T. J. HIGGINS.

595. Two life-size Photographs of T. Starr King.
 596. Cabinet Photograph, retouched.

MRS. HENRIETTA M. GIBSON.

597. Portrait of T. Starr King, wrought in crayon.
598. Portrait of a Child, wrought in crayon.

MISS C. SWAIN.

599. An Angel, copied from Sir Joshua Reynolds, oil.
600. The Waterproof Cloak, crayon.
601. Child's Head.

MISS AMELIA DE YOUNG.

602. General McClellan, in crayon.
603. General Grant, in crayon—first effort in forty years.

MRS. L. M. SPENCER.

604. Portrait of a Child, in oil.

W. D. DYER.

605. Mrs. Julia Dean Hayne; photograph finished by Tidball.
606. Miss Aunette Ince; Photograph finished by Tidball.
607. J. R. Hardenburg; Photograph finished by Tidball.
608. W. S. Jewett; Photograph finished by Tidball.
609. Six Photographs, finished by Tidball.
615. Children; three Photographs, finished by Tidball.
618. Group of Military men.

NAHL BROTHERS.

Portraits.

619. Colonel Charles Doane.

620. A. Ely.

621. A Little Girl.

Photographs.

622. Judge Field.
623. Child.
624. Miss Georgia Hodson.
625. Child.
626. Nahl Brothers.
627. Two Colored Paintings, Quail.
628. One Colored Painting, Hawk.
629. Photograph.
630. Painting in Colors.
631. Ten Pictures, India ink.
632. Attack on Emigrants.
633. Sixteen Miscellaneous Pictures.

T. M'CORTNAY.

699. Heads in Crayon. 5.

MILES CARDIFF.

704. Five Old Oil Paintings.

MISS GRACE FLETCHER.

709. Two Water Colored Photographs.

GEO. PFAFF.

711. Three Flutes.
714. Two Clarionets—San Francisco make.

L. BACON.

716. An Allegorical Monument, in plaster—"Liberty, Equality, Fraternity, and Union."

MARIANNE MATHIEU.

717. Water Color Sketches: Wild Flowers of the Hills of California, Wild Flowers of the Valleys of California, Hawthorne Roslyn—Auld Scotland
718. Four Pieces of Plaster Statuary, by a Lady of San Franciso: Sleep, Vanity, Mater Doloroso, Penitence.

A. PALTENGHI.

723. One Model, in Plaster.

P. MEZZARA.

724. James Donahue; bust in plaster.
725. S. Brannan; bust in plaster.
726. Mr. E. Fregnet; bust in plaster.
727. Miss Caroline Richings; medallion in plaster.
728. Miss L. H.; statuette in plaster.
729. Hand in Plaster.
730. Frame of Cameos.
731. Dog in Plaster.

AITKEN & CO—SACRAMENTO.

732. One California Marble Table.

P. LARSENUR.

733. One Sleeping Babe in Marbleshell.

O. FULLER.

734. One Aquarium.

MRS. J. H. SNYDER.

735. Hanging Shell What Not, for corner.

MRS. W. M. COPELAND.

736. One Vase Wax Fruit.

MRS. A. McDONALD.

737. Vase Wax Fruit, made by Mrs. L. McLane.

MRS. ADOLPH UNGER.

738. One Shade Wax Fruit, and one Shade Flower in Wax.

MRS. J. C. WARNER.

739. One Shade of Wax Flowers.

740. One Wax Basket and Wax Fruit.

DOMINGO MANGARINI.

741. Medallions in Plaster. 14.

754. Miniatures in Plaster, two groups.

756. Two Heads in Plaster.

758. Five Statuettes in Plaster.

762. Bust in Plaster.

763. Hand in Plaster.

PROF. A. DE LEO DE LAGUNA.

764. Show Case of Coins and Medallions.

JOSEPH BROTHERS.

765. Show Case of Jewelry, Statuette in Silver, and Bohm's Improved Ladies' Buckle.

P. J. O'CONNOR.

766. Fruit Piece.

P. A. GARIN.

767. Specimens of Penmanship, one frame.

F. S. BUTLER.

768. President Lincoln's Emancipation Proclamation, designed and written by exhibitor.

769. Do., Lithograph.

COL. M. C. SMITH.

770. Specimens of Penmanship, by Prof. Fernandez, of Santa Clara College.

H. RULLION.

771. One Head, in crayon.

E. P. HEALD.

772. Three Frames Specimens Penmanship.

W. G. DOOLITTLE.

773. Three Frames Specimens Penmanship.

H. G. WALTON.

775. Specimen of Compilation and Penmanship.

M. KRAKER.

776. One Frame Specimen of Penmanship.

WM. B. GLEASON.

777. One Shade; California Quail, carved in California sycamore wood; Fly, in oak; and Hawk's Feather, in basswood.

MME. NIEL.

780. One Shade, Flowers, in wax.

MRS. CLARK.

781. One Show Case of Bead-work, Shell-work, Wax-work, and Crochet-work, made by children in the Deaf, Dumb and Blind Asylum.

MRS. LEVY.

782. Two Vases Feather Flowers.

MISS ABBIE E. DE CAMP.

784. One Shade Sea Moss and Shells.

THOS. REILLY.

785. Show Case of Gold and Silver Coin.

DR. BEERS & CO.

786. One Shade Dentists' Work, Teeth on Gold, Rubber, and Porcelain.

FOURTH INDUSTRIAL EXHIBITION.

DR. H. J. PAINE.

787. One Shade Dentists' Work, Teeth on Gold, Rubber, and Porcelain.

DR. ADAMS.

788. One Shade Dentists' Work, Teeth on Gold, Rubber, and Porcelain.

DR. E. F. BUNNELL.

789. One Shade Dentists' Work.

DR. E. BELLE.

790. One Show Case Dentists' Materials.

791. One Apparatus for Extracting Teeth.

DR. HEALD.

792. One Show Case Dentists' Work and Materials.
MRS. HODGDON.

793. One Show Case, Bead Work-basket.
GRANT & DEVINE.

794. Three Marble Mantels.

P. J. DEVINE.

797. Bust of T. Starr King, in plaster.
798. Bust of Hon. D. C. Broderick, in plaster.
799. Bust of J. Hagan's Son, in plaster.
800. Bust of Hon. J. B. Weller, in plaster.
801. Bust of J. B. Devine, in California marble.
802. Bust of Ivy Wandesforde, in plaster.

E. F. LORQUIN.

803. One Shade Stuffed Birds.

A. HEREANN,

804. One Stuffed Cayote, and one Show Case Stuffed Birds.
MISS L. C. BALDWIN.

805. One Show Case Hair-work.

GEORGE SCHMITT.

806. One Show Case California-made Hair-work,
MRS. J. USZYNSKI.

807. One Show Case California-made Hair-work.

H. W. WILLIAMS.

808. One Show Case Quartz Specimens.

H. W. NOLTING.

809. One Show Case.

810. Two Baskets of Worsted-work Flowers.

812. Two Vases Flowers of Grain, Berries and Fruit.

814. One Cushion, Bead and Worsted-work.

815. One Piece, Bead and Worsted-work.

MRS. M. J. SCOOFY.

816. One Show Case Rare Collection of California Shells.

MRS. J. B. HARMSTEAD.

817. One Frame Fine English Flowers, in wax.

818. One Frame Common English Flowers, in wax.

819. One Frame Wax Fruit.

820. One Frame Dahlias, in wax.

821. One Frame Sea Moss, wax leaves.

822. One Frame Medallion, T. Starr King, in wax.

823. One Frame Dried Grapes, with Wax Vase and Leaves.

824. One Frame Shell Flowers, with Wax Leaves.

825. One Frame Sea Moss, with Wax Shells.

826. One Shade, Greek Slave and Turkish Figure, in wax.

827. One Shade Vase Imitation Parian Marble, with Wax Flowers.

828. One Shade, Figure of Lady, in wax—imitation of Parian Marble.

829. One Shade Rock of Coral and Marine Shells, in wax.

830. One Plate of Fruit, in wax.

831. One Shade Coral Basket of Flowers, in wax.

832. One Shade Japanese Lily, in wax.

833. One Shade Hand, in wax.

834. One Shade White Lily, in wax.

MISS P. V. GABBS.

835. One Shade Paper Flowers.

MRS. M. H. FERGUSON.

836. One Vase Paper Flowers.

837. One Shade Rosin Flowers, one Alum Basket.

838. One Shell Basket of Shell Flowers.

MRS. A. McDONALD.

839. One Shade Hose, made of Dog's Wool.

840. Miss Barton: Lord's Prayer, Specimen of Penmanship.

841. Mrs. Coffin: Sea Moss.

842. Mrs. Gharkey: Shell What Not.

843. Mrs. Gabbs: Frame Hair Work.

844. Mrs. Simons: Frame Fancy Hair-work.

845. Mrs. Hodgdon: Shell Basket.

846. Mrs. T. D. M. Hylton: Hair Wreath.

847. Mrs. Field: Shell What Not.

848. Mr. R. P. Clement: Three Sea Moss and Shell Frames.

849. F. P. Medina: Seven Frames Chenille and Worsted Work.

850. F. P. Medina: Three Frames Shell-work.

851. A. Lawrence: Bead-work.

852. Mrs. E. V. Joice: Wreath of Natural Flowers.

853. Mrs. G. H. Lovegrove: What Not.

854. Mrs. G. H. Lovegrove: Two Picture Frames, in Leather-work.

855. Antonio Perez: Four Shell Frames.

856. Antonio Perez: One Shell Frame What Not.

857. Antonio Perez: Two Nautilus Shells.

858. Miss J. Sessions: Two Frames Sea Moss and one Frame Hair-work.

859. Mrs. Uszynski: Frame Hair-work.

860. Mrs. Ferguson: One Frame Shell-work.

861. Mrs. Ferguson: One Basket Shell Flowers.

862. Mrs. Ferguson: One Alum Basket.

863. Mrs. Ferguson: One Vase Rosin Flowers.

864. Mr. & Mrs. Schmidt: Case Hair-work.

865. Mrs. Gender: Agricultural Wreath.

866. C. L. Abbotts: Shell and Moss-work.

867. Mrs. G. W. Lull: Agricultural Wreath.

868. Mrs. Wagner: Frame Hair-work.

869. A. C. Isaaes: Pastoral Scene, in Shells.

870. A. C. Isaaes: Case Shell-work.

871. Mrs. M. E. Woods: Case Hair-work.

872. Mrs. W. W. Hanseom: One Case Feather Pictures.

873. Mrs. Pittsinger: Frame Shell-work.

874. Mrs. DeCamp: Vase Shells and Sea Moss.

875. Miss Ellmaker: Four Frames Moss-work.

876. One Piece Moss-work.

877. Two Pieces Coral.

878. Mrs. H. Tomas: Bead Card Basket.

879. Miss Baldwin: Case Hair Jewelry.

880. Mrs. A. C. McDougall: Two Shell Frames.

881. Mrs. R. G. Lewis: One Leather Work basket, and one Leather What Not.

882. Mrs. B. G. St. John: Leather-work Frame.

883. Mrs. S. Atkinson: Six Leather-work Frames.

884. Mrs. Livingston, Redwood City: Leather-work Frame.

885. Miss A. H. Ruggles: Frame Hair-work.

886. Miss P. V. Gabbs: Frame Hair-work.

887. Mrs. D. Conrad: Frame Shell and Moss-work.

888. B. Manchester: Shell Picture Frame.

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